



University of California, Davis Center for Healthcare Policy and Research

Fifteen Year Review
July 2005 — June 2020



Center for Healthcare

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Dear Colleagues,

The Center for Healthcare Policy and Research (CHPR) is pleased to submit this report as part of the UCOP 15-year review process to retain our Center's Organized Research Unit (ORU) designation. This review process affords us the opportunity to reflect on our research and training accomplishments, the health policies and legislation our work has informed, and reaffirm our mission to improve the health of the public by contributing new knowledge about healthcare access, delivery, costs, and outcomes.

As you know, 2020 has been a very difficult year. As I write this, 179,519 Americans have died from COVID-19. By tomorrow, the number will have surpassed 180,000. Over 20 million have lost their jobs, and nearly 4 million have lost their employer-sponsored health insurance. The high costs and inequities in our healthcare system have been highlighted by the pandemic. As CHPR faculty and staff work from home, as we have since March, we continue our research aimed at improving health outcomes and healthcare services, and conducting analyses to inform evidence-based policy. This year, more than any other, highlights the critical need for evidence to guide health policy and to inform the public.

This report reviews our mission and history. It highlights our accomplishments in facilitating innovative, interdisciplinary research and research training. The body of the report is focused on our accomplishments in the seven-year period since the last review in 2013, since two prior five-year reports covering the earlier periods are available to learn more about the details of these earlier periods.

As you will learn from this report, CHPR has been remarkably successful in the past 15 years in bringing together multidisciplinary collaborations to expand health services research at UC Davis. CHPR members from across the University contribute valuable research that has direct application to producing evidence-based change in healthcare delivery and health policy. Our communications team assists investigators with dissemination of their research results. In recent years, we have expanded our capacity in community engagement and population health, broadening our focus to the intersection of healthcare with the community. Our success in developing and supporting the interdisciplinary teams essential to this work is evidenced in our continued growth in research funding and our funding rate for new grant and contract applications that exceeds 40%.

CHPR faculty and staff train and mentor the next generation of researchers who are so important to sustaining the goal of generating and synthesizing evidence to inform healthcare and health policy. Our track record in postdoctoral training grants and the academic success of our former trainees speaks to our strengths in this arena. Our seminars and classes, this year delivered entirely on Zoom, engage trainees in a wide spectrum of offerings on research design and methods, outcomes of recent research, and a range of health policy perspectives. The work of our Center develops capable researchers, supports collaborative research in health outcomes and health services, informs best practices, and assists health policymakers.

We greatly appreciate the consistent support to our mission and budget provided by the School of Medicine over the past five years, as well as increased support from the Office of Research. Core budget support has been essential to the success of our grants development team and to our continued mission to train health services researchers. I also extend thanks to the CHPR Leadership teamand the Internal and External Advisory Board members who have been integral to assuring the implementation of our mission despite the challenges.

We are proud of the accomplishments of our staff, members, and trainees, and expect that our important, interdisciplinary work will to continue to grow over the next five years. I look forward to sharing more with you during this review process.

Sincerely,

Joy Melnikow, MD, MPH

Joy Milul

Director

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Executive Summary

Since its inception in 1994, the UC Davis Center for Healthcare Policy and Research (CHPR) has conducted interdisciplinary and collaborative research and research synthesis to improve health outcomes and services, educate the next generation of health services researchers, and assist policy-makers in formulating effective health policies.

The mission of CHPR—to facilitate research, promote education, and inform policy about health and healthcare—is realized through interdisciplinary, collaborative research and training, research synthesis, and focused dissemination of research findings. This mission was recognized by the University when CHPR was designated as an Organized Research Unit (ORU) in 1999, under the auspices of the UC Davis Office of Research. CHPR is the only UC Davis-wide resource that supports interdisciplinary, innovative research on healthcare outcomes, access, quality and costs, synthesizes research and disseminates analyses directed to improving clinical care and health policy, and educates trainees in health services research methods. Center-affiliated faculty researchers represent a broad spectrum of disciplines from across the University.

This report describes the accomplishments and contributions CHPR staff and members have made to UC Davis and the greater research and policy community over the past 15 years, however, the primary focus is on the seven years since the previous review (2014 - 2020). Previous review reports are available which describe our accomplishments in detail for the periods 1999-2004 and 2008 - 2013.

Accomplishments

Research

CHPR provides a nexus for investigators with a broad range of expertise to collaborate on impactful research that informs healthcare delivery, quality, outcomes and costs. CHPR plays a unique role at UC Davis in supporting and fostering interdisciplinary research collaboration and grants development, grant administration, and dissemination of research findings. CHPR provides access to research staff skilled in advanced qualitative and quantitative methods, research synthesis, economic and policy analysis, subject recruitment, and project coordination. CHPR's four primary research programs represent the majority of CHPR research:

- Evidence to Inform Clinical Care and Health Policy
- Healthcare Quality and Safety Research
- Substance Use Disorders
- Mental Health Research

In each of these program areas, CHPR investigators and staff conduct high impact work that has informed clinical guidelines and health policy. A new research program area will be launched in this academic year: **Population Health and Community Engagement.** Increasingly, CHPR is approached by researchers to facilitate the community engagement aspects of their research. In addition, the Center for Healthcare Decisions and the Population Health Program have recently joined CHPR, expanding our expertise in public engagement and population health. For details on these programs, see Chapter 3: Interdisciplinary and Collaborative Research Programs.

Training and Education

CHPR's robust research training and career development activities train and inspire the next generation of health services researchers. CHPR provides networking and collaborative research opportunities for faculty and trainees from multiple disciplines across UC Davis and with our local, state, national, and international communities. Since 2005, CHPR has trained over 40 postdoctoral fellows in outcomes research supported by three federally funded training grants. Graduates are now in academic positions at UC Davis and across the nation. CHPR faculty teach courses in the School of Medicine, School of Nursing, and in the Graduate Groups in Epidemiology, Clinical Research, Health Informatics, Public Health Sciences and Nursing Science and Healthcare Leadership. They have developed and launched new courses (classroom and on-line) on comparative effectiveness research methods, health economics, and cost-effectiveness analysis over the last 15 years. CHPR offers undergraduates "hands-on" research experience through internships and assistantships. The Center hosts conferences, seminars, and a journal club to enhance learning about health services research and policy. Finally, CHPR has a long tradition of mentoring; CHPR members mentor students, fellows, and junior faculty. For details, see Chapter 4: Education, Training, and Career Development.

Grants Development and Administration

The CHPR Grants Development team assists faculty members from multiple departments in grant preparation and submission. Our flexible, cross-trained team has the capacity to multi-task on multiple simultaneous submissions. The team has expertise in a range of submission formats (federal, state, PCORI, foundation). They offer budget and subcontract preparation, review and editing of proposals, and coordination, assembly and routing of submissions. The skill of the grants development team enhances total grant and contract revenues, reflected in our funding success rate. CHPR staff also provide grant administration, including IRB submissions, HR management, monthly financial summaries throughout the award period, coordination of subcontracts, cost-recovery, purchasing, invoice processing, honoraria payments, subject incentive purchases, and travel and expenses reimbursements. They ensure timeliness and compliance with UC policy and agency regulations and provide investigators with expertise and recommendations for budget adherence, revisions, carry-forward, no-cost extensions, and comprehensive project closeout services. For details, see Chapter 2: Leadership and Staff

Impact

CHPR bridges the gap between producing research findings and the need for policy makers to have access to clear, unbiased evidence. Able to work with the "big picture" framework and tight timelines under which policymakers operate, CHPR faculty and staff are experts in providing research results and policy analyses in a form decision makers can use. CHPR work informs clinical guidelines including those of the US Preventive Services Task Force, the Agency for Healthcare Research and Quality, and the Center for Medicare and Medicaid Services. Policy analyses provide evidence synthesis to the California Legislature, and the Institute for Clinical and Economic Review. Regionally focused work has addressed Medi-Cal beneficiaries' access to care and integrated care models for people experiencing homelessness providing evidence to support reform of the local Medi-Cal model. For details see Chapter 5: Impacting Public Policy and Health.

Vision

Since its inception in 1994, CHPR has adapted to the changing landscape of healthcare, overcome challenges, and grown in membership and scope. CHPR research teams, with expertise in rigorous methods, have made substantial contributions to national healthcare quality metrics,

evidence-based clinical guidelines, and state health policies. CHPR-based research has deepened understanding of physician-patient communication, pain and pain management, women's healthcare, and effective mental health and substance use programs. Moving forward, CHPR sits on the brink of essential changes and adaptations that will insure its continued role as a unique resource at UC Davis, fostering interdisciplinary contributions to improving health and informing evidence-based health policy. Over the next five years, a new Director, selected through a competitive, national search, will lead CHPR in a post-pandemic time, as we relocate to the newly constructed Aggie Square. This new, upgraded location will enhance CHPR's visibility to the local community, Sacramento policymakers, and students interested in health policy and health equity research. A stable model of core administrative support from the Office of Research and School of Medicine will enable CHPR to develop an expanded, diversified research and evaluation funding portfolio with support from federal research programs, state government, foundations, industry, and philanthropy. CHPR will continue to fill its essential and unique role in bringing together students and faculty from an array of disciplines to conduct collaborative research to improve health outcomes, quality, access, and healthcare costs. For details, see Chapter 7: Vision.

Challenges and Solutions

CHPR has adapted, grown, and thrived despite many challenges over the years. Some are persistent and expected, others have been unanticipated. Pressing current challenges include the need for expanded core support to ensure adequate administrative staffing and further increases in extramural funding, successful renewal of the postdoctoral training grant to support CHPR's mission to train high impact health services researchers, and relocation to new space compliant with UC seismic regulations that will foster continued research collaboration and growth. Successful management by the School of Medicine of the leadership transition to the next CHPR director will ensure a productive future for CHPR. For details, see Chapter 8: Challenges and Solutions. Covid-19 has presented an unanticipated challenge to our nation and the world. CHPR has adapted our style of working and teaching, and expanded our research to address the pandemic. For details on CHPR's response to COVID-19, see that section of Chapter 1: About the Center for Health Care Policy and Research.

Justification for Continuance

The UC Davis Policy and Procedure Manual states that "The purpose of an organized research unit is to foster research that crosses boundaries among disciplines, departments, and schools or colleges and that cannot readily be done within the administrative structure of a single department or other administrative unit."

CHPR is interdisciplinary at its core, an ORU that provides the infrastructure, networking, skilled staff, and mentoring required to compete successfully for funding to carry out the complex, interdisciplinary work of health services research. It fosters the collaborations among faculty and across centers essential to support the generation and synthesis of evidence required for guiding safe and effective healthcare and health policy. The future will demand more scientists skilled in rigorous research methods to address the many current and future health and health services challenges faced by our nation. CHPR trains this next generation of researchers to work in interdisciplinary team settings, and has sent many into successful academic positions. No single school or department at UC Davis has the track record and capacity to foster such broad interdisciplinary research and research training.

The COVID-19 pandemic of 2020 has underscored the critical importance of evidence-based health policy more than any other event or situation in the past 100 years. Beyond COVID-19, the

US healthcare system faces enormous challenges. Healthcare quality is inconsistent, and gaps in patient safety and quality result in preventable injuries and deaths. The costs of healthcare in the US continue to increase, but health outcomes do not match those of other developed countries, many of which spend far less per capita on healthcare. CHPR plays a unique role at UC Davis in supporting the vital effort to generate research and research syntheses to support sound, evidence-based health policy in our nation.

1. About the Center for Healthcare Policy and Research



Chapter Snapshot

Since its inception in 1994, the UC Davis Center for Healthcare Policy and Research (CHPR) has been conducting interdisciplinary and collaborative research and research synthesis to improve health outcomes and services. CHPR been educating the next generation of health services researchers, and assisting policymakers and others by providing evidence to support effective health policies.

Introduction

The mission of CHPR—to facilitate research, promote education, and inform policy about health and healthcare—is realized through interdisciplinary, collaborative research and training, research synthesis, and focused dissemination of research findings. Center-affiliated faculty researchers represent a broad spectrum of disciplines from across the University. CHPR is the only UC Davis-wide resource that supports interdisciplinary, innovative research on healthcare outcomes, access, quality and costs, and educates trainees in research methods on comparative effectiveness, healthcare costs, quality of care, and patient-centered outcomes. CHPR's goal is to provide rigorous evidence, via its research findings and syntheses, which can be used to improve health outcomes and health policies—in California, across the US and throughout the world.

CHPR provides a unique resource to the University, which has become even more important as the COVID-19 pandemic highlights the many gaps and inequities in US healthcare. As an Organized Research Unit (ORU), CHPR provides a community for new and established health services



researchers and clinicians across schools and departments to define research questions and collaborate on work that improves health and informs healthcare policies. CHPR positions UC Davis at the forefront of research in healthcare quality and enriches the local, state, federal, and international health policy arenas. The Center provides exceptional training in health services research methods to prepare current and future researchers to conduct the scholarly and applied research critical to improving healthcare. Our mission complements and

furthers that of UC Davis (and the entire UC system) as an institution of learning, research and public service by delivering evidence-based research that improves healthcare and health outcomes, and informs health policy.

CHPR's research staff—comprised of statisticians, programmers, health policy analysts, and

qualitative and quantitative researchers—work with UC Davis faculty and

collaborators at other institutions. The Center's grants development team identifies funding opportunities for faculty members, helps members apply for grants and contracts to support their research, and administers their research awards. CHPR teams conduct research on health outcomes, the costs and quality of care, and identification and mitigation of health disparities. Since its 2017 merger with the Center for Health Care Decisions (CHCD), CHPR has facilitated engagement of faculty and trainees with community members, both for scholarly purposes and to promote civic engagement in health policy, capturing the public's voice on contemporary local, state, or national health issues. This work expands understanding of important issues affecting the delivery of health services in California and across the nation.

Outside Institutions

UC Davis Academic Campus

UC Davis Faculty

CHPR Staff

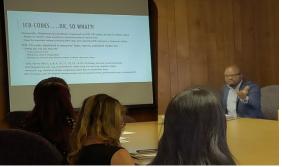
CHPR teams inform evidence-based healthcare policies and legislation by conducting research syntheses on key issues for policymaking bodies such as the US Department of Health and Human Services (HHS) and the US Preventive Services Task Force (USPSTF). They work annually in a UC-wide program to provide timely analyses of health-related legislation to the California State Legislature and participate as voting members on the Medicare Evidence Development and Coverage Advisory Committee (MEDCAC) and the California Technology Assessment Forum.

CHPR trains the next generation of health services and health policy researchers by mentoring undergraduate and graduate students, training post-doctoral fellows, mentoring early-career faculty, and offering courses and seminars on health services research methods and findings. Former CHPR trainees hold academic appointments across the US and at UC Davis.









Mission, Goals, and Objectives

CHPR Mission Statement:

To facilitate research, promote education, and inform policy about health and healthcare.

Goal:

To improve the health of the public by contributing new knowledge about access, delivery, costs, quality, and outcomes related to healthcare.

CHPR accomplishes its mission and goals through three primary channels:

Interdisciplinary and Collaborative Research
Develop and support health services research
teams and projects

Facilitate Research

Education and Career Development

Educate, train and develop the careers of scholars with interests in health services and health policy research

Promote Education

Research Dissemination

Synthesize, interpret and disseminate findings to inform clinical care, health services delivery, and health policy

Inform Policy



Brief History

CHPR Directors CHPR CHPR Associate Directors 1994-1996 2006-2009 1996-2006 2009-present Klea Bertakis, MD, Jov Melnikow, MD. • Richard Kravitz, • Renamed the MPH founder and MPH, is appointed MD, MSPH, is Center for director of the Director appointed Director **Healthcare Policy** Center for Health and Research Associate Director Associate Services Research Jeffrey Hoch, PhD, in Primary Care Directors: • Interim Directors: (2015-present) Edward • Jill Joseph, MD Callahan, PhD (2006);(1998-2003) · Klea Bertakis, • Debora Paterniti, MD, MPH PhD (2004-2007) (2006-2009) ORU status • Associate Director: awarded 1999 Joy Melnikow MD, MPH (2007-2009)

Figure 1. CHPR Leadership and Milestones

Established in 1994 as the Center for Health Services Research in Primary Care by founding director Klea Bertakis, MD, MPH, the Center's initial focus was on the role of primary care in the healthcare system and the interrelationship between healthcare delivery, costs, and patient outcomes in primary care. Richard L. Kravitz, MD, MSPH, successfully led CHPR as director between 1996 and 2006 and expanded its interdisciplinary role. In 2006, the Center was renamed the "Center for Healthcare Policy and Research" to reflect this expanded interdisciplinary mission to facilitate research, promote education, and inform policy about health and healthcare. After a brief tenure under Jill Joseph, MD, PhD, MPH, Dr. Bertakis took up leadership as Interim Director of CHPR from 2007-2009. CHPR's current director Joy Melnikow, MD, MPH, was appointed in September 2009 following a national search.

CHPR was also supported by Associate Directors (AD): Edward Callahan, PhD, (1998-2003) and Debora Paterniti, PhD, (2003-2007) served under Dr. Kravitz, and Joy Melnikow, MD, MPH, served as AD under Dr. Bertakis from 2007-09. In 2015, CHPR recruited Jeffrey Hoch, PhD, to serve as Associate Director. Dr. Hoch's research focuses on making health economics more useful to decision makers. His experience in health services research and health economics relates to

cancer, mental health and other health issues affecting poor and vulnerable populations. He has expanded CHPR's capacity to conduct and communicate cost-effectiveness research. (Additional details about CHPR's history are available from reports prepared for previous 5-year reviews.)

Organization of CHPR

As an ORU, CHPR comprises a ready-made infrastructure and community of support for its faculty members and trainees. Drawn from departments, schools and centers across UC Davis, they have a focus on research to improve healthcare and inform health policy. CHPR provides a network of research and training support not readily available through departments (e.g., study design advice, mentorship, pre-/post-award management, project management, data management, expertise in qualitative, quantitative, and policy analysis), as well connection to like-minded colleagues with whom to collaborate.

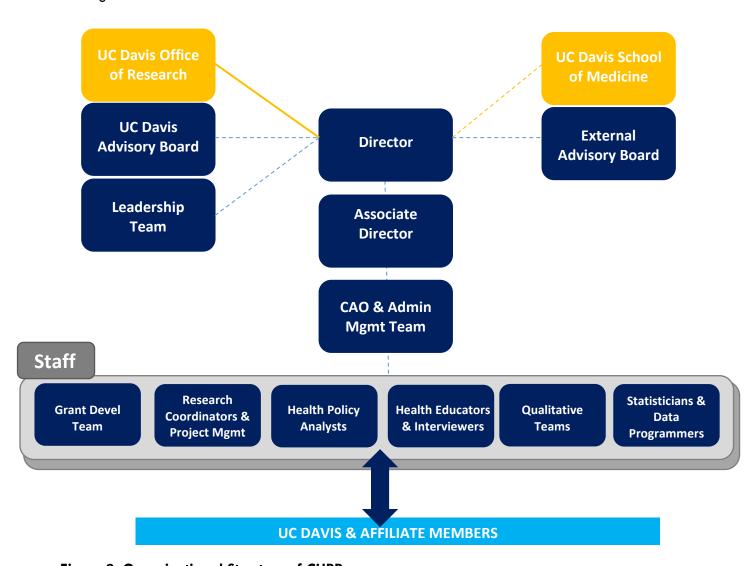


Figure 2. Organizational Structure of CHPR

As an ORU, CHPR falls under the administrative auspices of the UC Davis Office of Research. CHPR receives the majority of institutional funding support through the School of Medicine. The Director is advised by Internal and External Advisory Boards, and works with a Leadership Team including core faculty and administrative staff to insure the smooth functioning of the Center. (**Figure 2**).

Faculty Membership

CHPR faculty members are the key to accomplishing our mission of facilitating interdisciplinary research on health outcomes, quality, access and costs. CHPR offers memberships to UC Davis faculty and visiting scholars and affiliate memberships to students and individuals from external organizations. We proactively identify opportunities for collaboration and networking across disciplines that are unlikely to occur otherwise.



Table 1 displays the breadth of departments and affiliate organizations represented in CHPR, which currently has 148 members—a mix ranging from new researchers to emeritus faculty to policymakers (see Appendix 5).

Table I. Departments and Affiliate Organizations represented in CHPR Membership.

Type of Member	Department	
UC Davis Faculty	Department of Communication	
	Department of Communication Betty Irene School of Nursing Department of Economics	
	Department of Economics	
	Department of Sociology	
	Graduate School of Management	
	Department of Statistics	
	Department of Psychology	
	Department of Chicana and Chicano Studies	
	Department of Anesthesiology and Pain Management	
	Department of Public Health Sciences	
	Department of Emergency Medicine	
	Department of Family and Community Medicine	
	Department of Internal Medicine	
	Department of Obstetrics and Gynecology	
	Department of Pediatrics	
	Department of Psychiatry and Behavioral Sciences	
	Department of Radiation Oncology	
	Department of Surgery	
Affiliate Organizations	California State University Sacramento	
	California Department of Healthcare	
	Services (DHCS)	
	California Public Employees Retirement	
	System (CalPERS)	
	Sacramento County Department of	
	Health and Human Services	
	Kaiser Permanente	

Membership in CHPR provides access to CHPR's grant development and grant administration services, mentorship by senior research faculty, networking opportunities with researchers across disciplines with similar research interests, and inclusion in all CHPR research and policy seminars. Affiliate members from California state agencies, healthcare systems other than UC Davis Health, and other academic institutions enjoy all benefits except access to grant development and administration. In turn, CHPR's members are integral to the Center's success, conducting innovative research with support of CHPR staff, mentoring trainees, and making evidence-based contributions to health policy.

Research and Policy Analysis

CHPR members and staff work together in teams to conduct an array of research and policy analysis projects, described in detail in Chapter 3. In the past 3 years, to improve collaboration and enhance visibility, our research and research synthesis work has coalesced around four program areas: Evidence to Inform Clinical Care and Health Policy, Healthcare Quality and Safety, Mental Health, and Substance Use. The impact of this work is demonstrated by its application to analysis of proposed health-related legislation, national guidelines on preventive services and substance use, statewide mental health program evaluation, and national quality metrics (all described in more detail in subsequent chapters of this report). In addition, recent mergers with the Center for Healthcare Decisions and the Population Health Program have substantially expanded CHPR's capacity in community engagement, enabling work at the intersection of healthcare and community.

Research Training

Training and career development is a key element of CHPR's value. CHPR has a long tradition of research training with many years of externally funded training grants run by CHPR leadership team members. Over the last 15 years, CHPR has been the home of three federally funded post-doctoral training programs:

Program Title	Funding Source
Primary Care Outcomes Research (PCOR) Fellowship	Health Resources and Services Administration (HRSA)
Quality, Safety, and Comparative Effectiveness Research Training (QSCERT) Program	Agency for Healthcare Research and Quality (AHRQ)
Quality, Safety, and Comparative Effectiveness Research Training in Primary Care (QSCERT-PC) Program	Health Resources and Services Administration (HRSA)

CHPR researchers also provide research experiences for students and mentees through internships and assistantships. CHPR hosts conferences, seminars, and a journal club in additional efforts to disseminate research training to students, staff, and faculty of all levels. In addition, CHPR faculty members are active mentors of students, fellows, and junior faculty.

Institutional Recognition

The value of CHPR to UC Davis has been recognized by UC Davis Leadership in recent years. For example, at last year's 25th anniversary celebration of CHPR, UC Davis leadership, the former directors of CHPR, CHPR members and staff, all celebrated the growth and contributions of the

Center. Interim Dean of the UC Davis School of Medicine, Dr. Lars Berglund, called out CHPR as "something that we take real pride in." He described CHPR's interdisciplinary research mission as determining "how to implement healthcare delivery and do it in the right way, using scientific principles to guide this work." Dr. Berglund also mentioned that CHPR is "one of the most important tools" UC Davis Health has for connecting with California's state government policymakers. Dr. Paul Dodd, Associate Vice Chancellor for Interdisciplinary Research and Strategic Initiatives at the UC Davis Office of Research, noted that CHPR "plays a key role in facilitating collaborations in health services research and health policy that bridge the main campus and the medical/nursing campus."

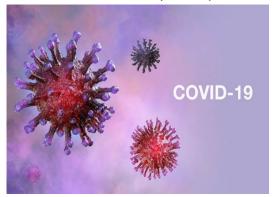




In April 2020, Chancellor May recognized CHPR's collaborative work on COVID-19 research in a newsletter focused on teamwork. He explicitly noted that, "our Center for Healthcare Policy and Research, in collaboration with the Center for Health and Technology and the Behavioral Health Center of Excellence, called for proposals related to COVID-19's impact on health services, access, outcomes and costs."

CHPR Administrative and Research Responses to COVID-19

The COVID-19 pandemic has had profound and diverse impacts on our society in the past 6 months. In mid-March, CHPR moved to conducting all work from home and meetings via Zoom, in accordance with University-wide policies and Governor Newsom's orders. Fortunately, CHPR



research being conducted at this time could be managed remotely or transitioned to the use of telephone and on-line interactions with research subjects. On June 1, CHPR progressed to limited reopening in full compliance with policies from the Office of Research, including masks, frequent disinfection, and symptom screening. We have 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.

Research to better understand the impacts of COVID-19 on patients, providers, and health systems is critical to devising strategies to address them. CHPR faculty and staff quickly engaged in research and research synthesis to evaluate impact and improve outcomes from COVID-19. CHPR, the Center for Health and Technology (CHT), and the Behavioral Health Center of Excellence (BHCOE) announced a joint call for pilot projects to be conducted during 2020, and made five awards to support highly meritorious, rapid projects to study the impacts of COVID-19 on health services, access, outcomes and costs, and to generate preliminary data for future extramural funding applications. A list of the pilot grant awardees is given below in **Table 2**.



Table 2. CHPR/CHT/BHCOE Pilot Funding Awards in Support COVID-19 Studies

Award Recipient	Funder	Project Title	Department
D. Miglioretti	CHPR	Sacramento area breast imaging registry (SABIR): Impact of COVID-19 on breast cancer screening, surveillance, diagnosis, and treatment	Public Health Sciences
C. Pereira	CHT	Hand therapy app video visit optimized care (HAVOC) study	Surgery
J. Rosenthal	CHPR	Virtual family-centered rounds during COVID-19 in the neonatal intensive care unit	Pediatrics
	CHT		
L. Abbeduto	внсое	The impacts of COVID-19 on the neurodevelopmental community	Psychiatry & Behavioral Sciences
P. Hastings	CHPR	Parenting during the COVID-19 pandemic: Implications for parent and child mental health and well-being	Psychology

In the wake of the COVID-19 pandemic, Dr. Melnikow, Dr. Gosdin and a CHPR staff team conducted a series of interviews, focus groups, and surveys to better understand the impact it has had on frontline physician professional and personal experiences. Bridging patient care and healthcare systems, physician experiences illuminate the successes and challenges of national and local responses to the pandemic. These insights can inform the responses of healthcare organizations and policymakers in addressing the rapidly shifting landscape. A proposal to fund and extend this work and track the impacts of the pandemic on physicians over time is pending with AHRQ.

Dr. Romano and the CHPR team providing the content for PSNet, on online resource for patient safety-related information funded by the Agency for Healthcare Research and Quality (AHRQ) published a COVID-19 primer synthesizing current literature on diagnostic error. The primer is focused on diagnostic bias, testing sensitivity, specificity, and false negative rates. The CHPR team has published several others pieces related to COVID-19 on PSNet as well.

From an administrative perspective, the economic impacts of the pandemic on the University and School of Medicine budgets are still playing out and we continue to await notice of our core budget support for the Academic Year 2020-21. Reductions in funding for research and

evaluations have begun to reverberate through California State contract funding and may also affect national research funding opportunities in future years.

Conclusion

Originally established as an Organized Research Unit focused on health services research in Primary Care, CHPR changed its name to reflect its broadened scope, including research on health outcomes, quality, access and costs. CHPR's research support services provide critical assistance to UC Davis faculty and trainees across multiple disciplines. Deep expertise in study design, qualitative, quantitative and health economics methods, as well as growing experience with engaging community members in the research process, provides investigators and trainees with extensive resources to support the design, management and implementation of their research projects. Today, CHPR comprises a strong community of health services researchers, policy analysts/advisors, and support staff ideally positioned to provide decision makers across California and the US with policy-relevant research findings.

2. Leadership and Staff





Chapter Snapshot

CHPR's human resources are comprised of a strong leadership team working with an experienced, skilled, efficient, flexible staff collectively equipped with the skill sets necessary for conducting robust health services research, policy analysis and evidence dissemination. Through its administrative and research personnel, CHPR offers a unique resource of wrap-around research support to CHPR members and others in the University community interested in conducting health services research or analyzing health-related policies.

CHPR staff provide pre/post award grant development/management; budget assistance; grant, manuscript, and report writing; project management; research support (through research assistants and clinical research coordinators); qualitative and quantitative analytic support; evidence review; and policy analysis. CHPR also periodically supplements temporary staffing needs for other departments by temporarily providing staff with specific subject-matter expertise for limited roles on projects managed by other departments. The grant development team provides comprehensive support for grant submission and administration of funded proposals.



Director

Joy Melnikow, MD, MPH, Professor of Family and Community Medicine, has led CHPR since 2009. She leverages her clinical, research, and teaching expertise to execute CHPR's mission. Dr. Melnikow's own research spans mental health, cancer screening and prevention in women, healthcare access, and the synthesis and integration of evidence in policy formulation. Under Dr. Melnikow's leadership, CHPR has experienced consistent growth in grant support, membership, and interdisciplinary program development. Dr.

Melnikow's day-to-day management of CHPR's 30-person staff is supported by the Associate Director and a leadership team of key faculty, the CHPR CAO, and CHPR supervisors. She has led CHPR through the challenges of 2020, including the COVID-19 pandemic, which required all staff to work from home, and the unexpected departure of the previous CHPR CAO.

Director's Accomplishments

Dr. Melnikow's focus on research related to health outcomes, access, and costs, and the effective translation and application of research to healthcare policy, as well as her work training and mentoring the next generation of health services researchers all reflect CHPR's mission and objectives. She devotes significant time to teaching and mentoring trainees and junior faculty, to her own research, and to overseeing the activities of the Center, all in addition to seeing patients in the Family Medicine clinic regularly and teaching clinical medicine to both medical students and residents. In recognition of her leadership of CHPR she was awarded the Dean's Award for Excellence in Leadership of a Research Team from the UC Davis School of Medicine in 2011, and the UC Davis Academic Senate award for Distinguished Scholarly Public Service in 2013. A selection of Dr. Melnikow's research, education and policy-related accomplishments include:

- Vice-Chair of Medical Effectiveness and Public Health for the <u>California Health Benefits</u>
 Review <u>Program</u>, leading a team producing comprehensive, rapid turn-around analyses of
 the public health impacts of all health insurance benefit mandates proposed by the
 California State legislature.
- Principal Investigator on systematic reviews to support US Preventive Services Task Force (USPSTF) guidelines on adjuvant <u>screening for women with dense breasts</u> and on <u>cervical</u> cancer screening.
- Leading the <u>investigation</u> of regional access to primary care for people with Medi-Cal (California Medicaid) insurance; authoring a brief on Medi-Cal managed care in Sacramento County, and presenting findings to key stakeholders and thus initiating a Medi-Cal reform process in Sacramento.
- Leading an evidence synthesis, a presentation to stakeholders and a report on integrated care for people experiencing homelessness designed to be applied in Sacramento County.
- Serving as a member of the Medicare Evidence Development and Coverage Advisory Committee (MEDCAC) and of the California Technology Assessment Forum (CTAF) voting panels.
- Program Director and PI of the AHRQ-funded Quality, Safety, and Comparative
 Effectiveness Research Training (QSCERT) T32 program, an interdisciplinary, post-doctoral
 program through which 16 primary care, surgical, trauma and urgent/emergency care
 outcomes researchers, most of whom went on to academic appointments, were trained.
- Director and Instructor-of-Record 2010-2019 of an innovative, hybrid course Principles
 and Methods of Comparative Effectiveness Research developed, with NIH support in
 collaboration with the UC Davis Clinical and Translational Science Center (CTSC), to
 expand training in comparative effectiveness research. The course, offered annually,
 includes publicly accessible on-line materials used in training comparative effectiveness
 researchers across the nation.
- Mentoring numerous undergraduate, graduate, and medical students, as well as residents, fellows and junior faculty, across multiple UC Davis departments over the last 15 years.
- Publishing 115 peer-reviewed research papers (see Appendix 6).

Associate Director



CHPR's Associate Director, Jeffrey Hoch, PhD, was recruited to UC Davis in Fall 2015. He is Professor and Chief of the Division of Health Policy and Management in the Department of Public Health Sciences. Dr. Hoch's experience is in health services research and health economics. He pursues research that makes health economics more useful to decision makers. An award-winning teacher, Dr. Hoch has taught Health Economics classes in the United States and internationally. His extensive research, teaching, and mentoring experience with students, fellows, and faculty has expanded CHPR's capacity to conduct and communicate cost-effectiveness research.

Associate Director's Accomplishments

Before being recruited to be CHPR's Associate Director, Dr. Hoch was Director or co-Director of three research groups in Canada. Under Dr. Hoch's tenure as Associate Director, CHPR has experienced consistent growth in collaborations and educational activities. He substantially improved the weekly CHPR seminar series, expanding the speaker base to include speakers with additional breadth and expertise and increasing attendance. CHPR's seminar series is cross-listed as EPI 291, a Department of Public Health Sciences class, which has served to enhance connections between applied health researchers at both UC Davis campuses. Dr. Hoch has ensured the continuation of the CHPR seminar series during the current pandemic; the coming academic year's seminar series is being offered via Zoom.

Dr. Hoch's focus on research impact and the application of research to healthcare policy, cost-effectiveness research, and training and mentoring the next generation of health services researchers dovetails nicely with CHPR's mission and objectives. In addition to significant time devoted to oversight of CHPR, Dr. Hoch established and now leads the <u>Division of Health Policy and Management</u> in the UC Davis <u>Department of Public Health Sciences</u>. Dr. Hoch serves as an important connector between those with research interests on both the main UC Davis campus in Davis and the UC Davis Health campus in Sacramento. In addition, Dr. Hoch has trained international students at CHPR (e.g., from the Centre for Health Economics, University of York, UK, and from University of British Columbia). In 2018, Dr. Hoch received the Dean's Team Award for Inclusion Excellence in Community Engagement from the UC Davis School of Medicine. A selection of Dr. Hoch's research- and education-related accomplishments include:

- 200+ peer-reviewed publications (see Appendix 6), 150+ funded research projects, 10+ book chapters, 250 invited talks and 180 courses taught over a 20-year period.
- 2020 Recipient of the Advanced Leadership Development Certificate from the UC Davis Health Program.
- Teaching Awards from the University of Toronto in Toronto, and Western University in London, Ontario, Canada; 2 Teaching Awards and 2 honorable mentions for an Outstanding Short Course from the Society for Medical Decision Making (SMDM).
- Cost Lead for the <u>California Health Benefits Review Program</u>, leading the cost analysis for a team producing comprehensive, rapid turn-around analyses of the impact of all health insurance benefit mandates proposed by the California State Legislature.
- Methodology Panel Member for the Institute for Clinical and Economic Review, USA.
- Serving on the <u>Global Scientific Committee</u> of the Movember Foundation (to raise awareness of men's health issues like prostate cancer), Australia.
- Visiting Fellow with the Office of Health Economics (OHE), England, UK.

Leadership Team

CHPR's leadership team provides long-term strategic and operational guidance to the Director. The team reviews member applications for use of CHPR resources, reviews and approves new membership applications, and provides input on program development and direction (i.e., conferences, fellowship programs, etc.). In addition to CHPR's Director and Associate Director, the following faculty serve on the leadership team:



Patrick Romano, MD, MPH

Patrick Romano, MD, MPH, Departments of Internal Medicine and Pediatrics. Dr Romano's research and teaching interests focus on developing, testing, and validating healthcare quality measures, using outcomes data to improve the quality and effectiveness of healthcare, and studying the role of clinicians in optimizing quality and safety in healthcare.



James Holmes, MD

James F. Holmes, MD, MPH, Department of Emergency Medicine. Dr. Holmes' research aims to improve the quality of care that patients receive in the emergency department, including identifying appropriate indications for computed tomography utilization in children with blunt head or abdominal injuries. Dr. Holmes directs the School of Medicine's interdisciplinary KL2 career development program.



Eleanor (Bimla) Schwarz, MD, MS

Eleanor Bimla Schwarz, MD, MS, Department of Internal Medicine. Dr. Schwarz conducts research centered on the use of technology to meet the needs of vulnerable populations and improve women's health, and also serves as the co-Director and Principal Investigator for CHPR's current T32 post-doctoral training fellowship program, the Quality, Safety and Comparative Effectiveness Research Training in Primary Care (QSCERT-PC) program.

CHPR CAO Michael Webster, BS, and supervisors Meghan Weyrich, MPH, and Melissa Gosdin, PhD, also serve on CHPR's leadership Team.

Advisory Boards

CHPR is fortunate to have both internal (to UC Davis) and external advisory boards. Current board members are shown in Appendix 3.

The **CHPR Internal Advisory Board** provides insight, ideas, and support to CHPR leadership. Advisory Board members enhance awareness and visibility of CHPR across the University.

CHPR's External Advisory Board was created after the conclusion of its previous review in 2013. External Advisory Board members provide national perspectives, enhance awareness of CHPR at a national level, and advise CHPR leadership on strategic direction.

Staff

CHPR is home to a robust and diverse staff with administrative and/or research expertise. CHPR staff offer a wide range of knowledge and experience in research methods, policy analysis and research administration. They have diverse academic and professional backgrounds in, for example, public health, sociology, psychology, statistics, economics, and communications. The

"I have had the privilege of working with some incredibly talented, skilled, and conscientious staff at CHPR, who go above and beyond the 'call of duty' every single day."

~ Patrick Romano, M.D., M.P.H. Professor, Internal Medicine and Pediatrics, UC Davis majority of CHPR staff have advanced degrees, including doctoral degrees. This transdisciplinary team provides unique in-house support for faculty with diverse research needs.

Many of our staff members have received recognition for their outstanding research contributions. For example, in 2019, Maria Shrestha (research administrator) and Camille Cipri (project manager) were recognized under the UC Davis Staff Appreciation Recognition (STAR) Program for their work in both grants and project management. This

was Camille's second award, as she and Gisela Escalera (research assistant) previously received STAR awards for excellent work on the <u>Values and Options in Cancer Care (VOICE) project</u>.

UC Davis students also work on CHPR research projects. Our undergraduate student research assistant program provides inspiration for students to enter careers in healthcare and health services research.

Research Staff

CHPR research staff are highly flexible and versatile, capable of utilizing multiple research methods (e.g., randomized-controlled trials, cohort studies, research employing simulated patients, qualitative analyses, survey research, etc.) on research teams led by CHPR faculty that address a broad range of research questions.

Project Managers

CHPR **project managers** manage a variety of projects including multisite, randomized controlled trials, complex data analyses, systematic reviews, and qualitative investigations. Project managers work with researchers at UC Davis and other institutions to optimize project resources, supervise research staff, develop study recruitment and enrollment protocols, manage IRB submissions and modifications, and prepare research manuscripts and reports.

Research Assistants

CHPR's **research assistants** develop and conduct in-person and telephone surveys, and collect, enter and analyze data. Some are experienced in:

- o training and managing simulated patients
- o recruiting and enrolling diverse patient populations
- o engaging research subjects in a variety of interventions

Health Policy Analysts

CHPR's **health policy analysts** conduct systematic and rapid evidence reviews. These analysts staff the California Health Benefits Review Program (CHBRP) projects, providing medical effectiveness and public

health impact analyses of proposed health insurance legislation. Health policy staff also give annual guest lectures on health policy topics to first- and second-year medical students and for the MIND Institute. Health policy analysts also train UC colleagues in systematic review.

ICD-9-CM and ICD-10-CM/PCS Coders CHPR has **staff expertise in ICD-9-CM and ICD-10-CM/PCS coding** and has provided support for the AHRQ Quality Indicators conversion project and for the Centers of Disease Control and Prevention (CDC) morbidity surveillance measures for ICD-10-CM/PCS. Staff have also participated in expert panels to review indicator specifications to support proposed ICD-10 maps.

Statisticians

Led by Professor Daniel Tancredi, **CHPR statisticians** assist researchers in developing effective study designs and analytic plans for clinical research studies including cluster-randomized trials, longitudinal studies, and surveys that use complex, probability sampling techniques. They conduct complex analyses of large datasets including national, state, and insurance datasets. They have experience with a wide variety of biostatistical, psychometric, and econometric applications, including instrument development and validation and the specification and interpretation of regression models for multilevel, time-series, and panel data.

Qualitative Researchers CHPR's qualitative research team, trained and led by Melissa Gosdin, PhD, work with principal investigators within the Schools of Medicine and Nursing, and on the main UC Davis campus, investigating a wide variety of topics. Specific studies focusing on doctor/patient interactions, opioid tapering, barriers and facilitators to improving healthcare delivery, social isolation and its relationship to chronic pain, life context in primary care, sexual assault and HIV prevention, smoking cessation, collaborative depression care, and impacts of COVID-19 on frontline physicians are examples of current and recent research conducted by our qualitative team.

Administrative Staff

Administrative Staff

CHPR **administrative staff** members assist faculty researchers with a variety of research-related tasks:

- identifying appropriately skilled, available CHPR staff for research projects
- managing human resource issues
- o maintaining compliance for grant and human subject reviews
- managing project budgets

Administrative staff also support a variety of Center activities such as:

- coordinating the QSCERT-PC fellowship program (see Chapter 4 for more details)
- o organizing conferences and seminars
- o writing and disseminating the CHPR newsletter
- maintaining the CHPR website (see Chapter 6 for more details)

Grant Development Team

The CHPR administrative staff include a **grants development** team that works collaboratively with CHPR members to support them in all aspects of the grant application process, including:

- reviewing/polishing project narratives
- o developing budgets and timelines
- developing and securing subcontracts
- collecting biosketches/CVs
- o routing proposals for approval and signatures
- o submitting final applications

The grants development team also coordinates the use of faculty and staff expertise to provide technical support and consultation to assist researchers with study design.

Grants development team members obtain ongoing training from funding agencies and from the UC Davis Office of Research to ensure that they are knowledgeable about the most current requirements of federal and state agencies as well as private foundations.

Additionally, the team's established relationships with staff in the Office of Research, School of Medicine, and other campus departments

facilitate the efficient processing of proposals through each office's review process to ensure timely proposal submission.

Financial Administration

CHPR administrative staff also provide support for funded grants through **financial administrative services**. Our experienced team, which includes a Certified Research Administrator, manages extramural and intramural funding from many different sources, such as:

- the National Institutes of Health (NIH)
- American Cancer Society (ACS)
- Agency for Healthcare Research and Quality (AHRQ)
- Robert Wood Johnson Foundation (RWJF)
- o various agencies of the State of California

Financial administrators meet with Pls post-award to discuss immediate project needs and any changes to the project and budget that have occurred since proposal submission. They provide monthly financial summaries throughout the award period, including expenditure reports and budget projections for the end of the award year.

CHPR financial staff members are exceptionally skilled at planning for and managing large, complex projects. Tasks include:

- coordinating contract-related interactions between researchers and funding agencies
- overseeing all financial aspects of the project, including cost-recovery, purchasing, invoice processing, honoraria payments, subject incentive purchases, reimbursements
- ensuring timeliness and compliance with UC policy and agency regulations and providing investigators with recommendations for budget adherence, revisions, carryforward, and no-cost extensions
- executing independent contractor agreements, multi-campus agreements and subcontracts, and providing comprehensive project closeout services

Conclusion

CHPR is led by an accomplished, experienced director and associate director, and is advised by both Internal and External advisory boards. The CHPR leadership team provides guidance and joint decision making. CHPR staff members are highly skilled, experienced and flexible in their ability to provide CHPR faculty members the research and administrative support they need to conduct impactful health services research and health policy analyses aimed at improving healthcare outcomes, access, quality and costs.

3. Interdisciplinary and Collaborative Research Programs



Chapter Snapshot

CHPR facilitates and supports interdisciplinary collaborations, across the University and beyond, in conducting research on health outcomes, access, quality, and costs. The majority of CHPR research currently falls primarily within four research programs. These programs bring together diverse researchers from multiple scientific disciplines to work on a shared interest area and produce high impact findings. These research programs are Evidence to Inform Clinical Care and Health Policy; Healthcare Quality and Safety; Mental Health; and Substance Use.

In 2017, the Center for Healthcare Decisions joined CHPR, and in 2020, the UC Davis Population Health Group joined CHPR.A new research program, Population Health and Community Engagement, will be launched during this academic year.

Interdisciplinary collaboration brings together a variety of perspectives to produce innovative approaches to the complex challenges and inequities of US healthcare. CHPR's role as an ORU is to develop relationships across departments and centers in the University and nurture scientific collaboration. CHPR provides a unique resource to UC Davis, state, national and international entities interested in improving healthcare quality, safety, outcomes, economics, and policy. Our commitment to interdisciplinary collaboration is the key to our success, and has resulted in production of a high volume of research findings with high impact. Major highlights of our recent work are described in this chapter.

Introduction

CHPR provides unique and critical research, research synthesis, and policy analysis assets to UC Davis and UC Davis Health. CHPR faculty are experts in clinical, quantitative, and qualitative research and represent a range of disciplines and departments across the University. They lead scientifically rigorous projects that produce results with potential for improving health, healthcare, and informing state and national health policy. In 2019-2020, there were 54 CHPR-affiliated grant-supported academic personnel. Over the 2014-2020 review period, 35 different CHPR faculty utilized CHPR's grant development/submission services. (See Appendix 3 for additional details.) Over the last seven years, skilled and experienced CHPR staff members have supported an average of 17 awarded projects.

CHPR Research Programs

Over the past 3 years, CHPR has applied a thematic program-based model to organize grant development and research collaboration among faculty. These program areas are flexible and likely to shift over time. Currently, the four primary CHPR research programs are:

- Evidence to Inform Clinical Care and Health Policy
- Healthcare Quality and Safety Research
- Mental Health Research
- Substance Use Research

With the Center for Healthcare Decisions (CHCD) and the Population Health Program (PHG) having recently joined CHPR, an additional research program will be launched in this academic year: Population Health and Community Engagement. CHPR has also embarked on research related to COVID-19 in 2020 (described in Chapter 1).

The following sections briefly describe CHPR's research programs, highlight noteworthy research impacts of each on health, healthcare and health policy.

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 analysis designed to have relevance to clinical practice, specific healthcare policies, and healthcare costs. Systematic and rapid evidence reviews are a particular area of CHPR expertise; the Center has an exceptionally skilled team of faculty and staff who have years of experience in conducting these reviews. Such reviews often have had direct impacts on guidelines and policy. For example, work by CHPR teams has informed United States Preventive Services Task Force (USPSTF) guidelines on screening for breast, cervical and prostate cancer, hypertension, and postpartum depression. CHPR teams also conduct rapid evidence reviews as part of the California Health Benefits 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 60day turn-around time. Contributions to this program by CHPR have grown steadily over the past 10 years. In addition, CHPR analyses

"We have relied on the CHPR to provide independent assessment of the cost effectiveness of our intervention research. This is now a requirement for all studies funded by the Federal Department of Education. We could not have successfully competed for these projects without the CHPR."

 Aubyn Stahmer, PhD Professor, Department of Psychiatry and Behavioral Sciences, UC Davis have contributed to pricing recommendations for new medications coming into the market. Some recent highlights from this research program appear below.

Systematic reviews to inform disease prevention and treatment

Supported by the Agency for Healthcare Research and Quality (AHRQ) and CHPR staff with expertise in evidence synthesis, Drs. Melnikow and Fenton have led several systematic reviews in collaboration with investigators at Kaiser Permanente, the Patient Centered Outcomes Research Institute (PCORI) and the Research Triangle Institute (RTI) to inform recommendations about disease prevention and treatment. These systematic reviews informed recommendations made by the United States Preventive Services Task Force (USPSTF). The USPSTF 2016 recommendation statement for breast cancer screening was based in part on a published CHPR systematic review of supplemental screening for women with dense breasts using ultrasound, MRI, and digital breast tomosynthesis. Dr. Melnikow also led a review published in JAMA on approaches to cervical cancer screening that to informed the USPSTF 2018 recommendation on that topic. Dr. Fenton led a review published in JAMA of the evidence on PSA testing for prostate cancer screening, which included evaluation of prostate cancer treatment and related harms, which informed the USPSTF 2018 recommendation for shared decision making on prostate cancer screening. Building on this work, Dr. Fenton has collaborated with colleagues at PCORI and RTI International to develop an evidence map to support clinicians and patients in shared decisionmaking about prostate cancer treatment options.

CHPR staff have also collaborated with colleagues at the Kaiser Permanente Evidence-Based Practice Center to conduct evidence reviews informing USPSTF recommendations on preventive interventions for perinatal depression; screening and behavioral interventions for unhealthy alcohol use in adolescents and adults; behavioral and pharmacotherapy interventions for tobacco cessation in adults, and hypertension screening in adults.

Economic evidence to inform national funding decisions

Dr. Hoch and his international team of colleagues studied the value of two new drugs for the treatment of Amyloidosis, a rare and devastating disease. Their economic model was used in a report for the Institute for Clinical and Economic Review (ICER), presented at the Midwest Comparative Effectiveness Public Advisory Council (Midwest CEPAC), and published in the scientific literature. The <u>published findings</u> were used in ICER's recommendation on drug pricing to national healthcare payers.

Lessons from applied health technology assessment

During his post-doctoral fellowship at CHPR with Dr. Hoch, Dr. Logan Trenaman <u>published a study</u> reviewing ICER's assessments and describing how cost-effectiveness, other benefits, and contextual considerations affect ICER Council members' assessments

of value. Two case studies highlighted that factors beyond costeffectiveness can lead to lower (e.g., tisagenlecleucel) or higher (e.g., voretigene neparvovec) assessments of a new drug's value. Thus, council members' judgments about the value of interventions were influenced by other benefits or disadvantages and contextual considerations but anchored by economic evaluation.

Informing State Health Policy

The California Health Benefits Review Program (CHBRP), a UC-wide collaboration, has a direct impact on state policy through rapid evidence review and impact analysis of health legislation proposed during the legislative process. CHPR faculty and staff have conducted rapid reviews and analyses of the medical effectiveness of various medical processes and interventions, their public health impacts, and their utilization costs, contributing to more than 80 CHBRP reports since 2005. CHPR has averaged 7-9 analyses (on public health or medical effectiveness) per year, each produced within a 60-day timeframe to meet the Legislature's policy committee calendar. Topics range from broad (equivalent coverage for telehealth services) to narrow (coverage for applied behavioral analysis for individuals with Autism Spectrum Disorder). A list of CHBRP reports featuring CHPR contributions appears in Appendix 6.

Comparative Effectiveness

The Personalized Research for Monitoring Pain Treatment (PREEMPT) study, led by Dr. Kravitz and funded by the National Institute of Nursing Research and the National Center for Advancing Translational Sciences, developed a smartphone app to allow chronic pain patients and clinicians to run personalized experiments (n-of-1 trials) comparing two different pain treatments to support patient-clinician collaboration on identifying the best pain treatment. Results showed reductions in use of analgesics (less so with opioids) without concomitant increase in pain. These findings have implications for engaging patients directly to improve management of chronic pain.

Medi-Cal Reform

In 2018 a CHPR team led by Dr. Melnikow summarized the history of Medi-Cal managed care in Sacramento County and described the challenges faced by patients due to the complex system and frequently shifting contracts with providers. Recommendations for improvement were reported in a brief posted on the CHPR website and presented to stakeholders. A team led by Dr. Melnikow used simulated patient calls to document significant differences in access to primary care for Medi-Cal beneficiaries between counties in the region.

Healthcare Quality and Safety Research

Healthcare quality and safety research is critical to improving effective and efficient delivery of healthcare services in the US. Since 2005, CHPR has expanded its work on patient safety and

quality across multiple levels and sectors of healthcare. Cumulatively this work has improved the accuracy and fairness of quality measurement among healthcare entities and has important implications for healthcare system improvement, and informing healthcare contracting and finance. Patrick Romano, MD, MPH, a nationally renowned healthcare quality expert has led the CHPR



effort in quality and safety research over the last 15 years. He and his collaborators have developed and evaluated metrics, tools, and resources to measure and publicly report patient safety and quality outcomes for a variety of healthcare settings. Dr. Romano has played a major role in the development of well-respected and widely employed methodologies in the field. His significant body of work informs influential organizations such as the <u>Centers</u> for Medicare and Medicaid Services (CMS), Agency for Healthcare Research and Quality (AHRQ), Joint Commission, the California Office of Statewide

Health Planning and Development (OSHPD), Department of Corrections and Rehabilitation (CDCR), National Association of Healthcare Data Organization (NAHDO), National Quality Forum and the World Health Organization (WHO).

Quality Measure Development and Maintenance

In 2012 Dr. Romano and his CHPR team led the transition for the AHRQ Quality

HSR HEALTH SERVICES RESEARCH Impacting Health Practice and Policy Through State-of-the-Art Research and Thinking

Indicators to the ICD-10-CM/PCS diagnosis code sets by mapping more than 228 clinical concepts and 9,000 ICD-9-CM codes. Detailed in the journal HSR, this work has far-reaching implications for national health policy related to reimbursement, public reporting on quality of care, and system quality improvement programs.

Currently, the CHPR quality team is providing clinical and technical expertise to <u>AHRQ</u> and <u>Mathematica</u>, <u>Inc.</u> about the intent, implementation and interpretation of AHRQ quality indicators. This work will be used by public and private payers for contract design, and health care organizations for quality improvement.

Patient Safety Measure Development and Maintenance

The CHPR quality team works with IMPAQ International and the 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 Dr. 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, are the coeditors-in-chief of AHRQ's <u>Patient Safety Network</u> (PSNet), internationally regarded as an authoritative web-based resource for evidence on improving patient safety. The 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). Since

October 2019, the team has published 23 commentaries written by UC Davis faculty, fellows, residents, students and staff from over thirteen School of Medicine Departments / Divisions, published <u>brief guides</u> on key patient safety topics, including healthcare team communication through <u>daily huddles</u> and <u>transitions of care</u>. In the wake of the COVID-19 pandemic, the editorial team published three primers addressing key patient safety issues:

COVID-19 and the Safety of Older Adults;

Team and Human Factors to Improve Safety; and COVID-19 and Diagnostic Error.

Creating, Testing, and Evaluating Public Report Cards Using Quality Metrics

In partnership with the California Office of Statewide Health Planning and Development, Dr. Romano's teams developed and refined the methodology for a state-mandated annual public report card on cardiac bypass surgery adverse outcomes and mortality (2005-2019).

The California Department of Corrections and Rehabilitation (CDCR) is in federal receivership due to substandard healthcare for those who are incarcerated. Dr. Romano and his team provided recommendations for the CDCR Healthcare Services Dashboard to improve the dashboard performance measure validity.

Mental Health Research

Since 2015, CHPR researchers have received awards to perform mental health research with support from federal and state agencies as well as foundations. For example, CHPR faculty members have conducted research on the role of primary care in reducing suicide risk, development of behavioral health measures, and the intersection of homelessness and behavioral health.

"As a mid-career faculty, CHPR was foundational in supporting the development of my research. They represented a key resource from which I could receive guidance on grant opportunities, access to staff support, or guidance on project management.

Without CHPR, I would not be where I am today."

~Tara Niendam, MD, PhD
Associate Professor in Residence
Executive Director
UC Davis Early Psychosis Programs (EDAPT and SacEDAPT

Specific examples include:

Tailored Activation of Middle-Aged Men to Promote Discussion of Recent Active Suicide Thoughts: A Randomized Controlled Trial Drs. Jerant, Kravitz, and Franks, with CHPR staff support, conducted a <u>randomized controlled trial</u> to promote discussion of recent active suicide thoughts among middleaged men. 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.

County mental health crisis services for Adult/ Transitional Age Youth CHPR has partnered 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, partner with a team at UCSF to conduct the evaluation, funded by the Mental Health Oversight and Accountability Commission (MHSOAC).

The Rise of Early Psychosis Care in California: An Overview of Community and University-Based Services Drs. Niendam and Melnikow collaborated with CHPR staff, funded by the MHSOAC, to evaluate California's early psychosis treatment programs. The <u>survey</u> 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.

How Do Early Psychosis Services
Define and Operationalize the
Duration of Untreated Psychosis?

Drs. Niendam and Melnikow also <u>studied the differences</u> in provider start and end points of "duration of untreated psychosis" (DUP), which affects initiation of recommended early psychosis care. They found that front-line providers proposed a more structured operationalization of DUP than the traditional literature.

Based in part on this preliminary work, 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 will evaluate the outcomes of 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.

QTc monitoring in adults with medical and psychiatric comorbidities: Expert consensus from the Association of Medicine and Psychiatry CHPR faculty member, Dr. Glen Xiong, was first author on the publication of <u>expert consensus guidelines</u> for clinicians developing an algorithm to determine the need for ECG monitoring of the QTc for complex patients with medical and psychiatric comorbidities who are prescribed psychiatric medications.

Substance Use, Homelessness, Mental Illness and Medicaid Coverage: A Set-up for High Emergency Department Utilization CHPR researchers have also focused on the <u>intersection of substance use and mental health</u> problems, which frequently co-exist in people presenting to the emergency department. Dr. Aimee Moulin, MD and Dr. Ethan Evans, PhD, as post-doctoral fellows at CHPR, worked with Dr. Melnikow to evaluate six years of California emergency department (ED) data to examine the impact of these co-occurring problems on frequent ED use. They found that patients with substance use disorders, who are homelessness and have public healthcare coverage are more likely to be frequent users of EDs for mental illness.

Substance Use Disorders

Substance use disorders (SUD) 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 the field through their work on tobacco cessation, prescription opioid overuse, and the impacts of prescription opioid tapering on patient health outcomes. Examples of CHPR's work in the areas of tobacco cessation and opioid use/addiction are given below.

Tobacco Cessation

Elisa Tong, MD, MS, has a long affiliation with CHPR, starting as a junior research mentee and growing into a nationally recognized scholar who contributes significantly to local, state, and national tobacco cessation efforts. Over the last six years, <u>Dr. Tong's work</u> has gained national

importance based on her <u>research on the impact of linking the</u> <u>state tobacco quitline to the electronic health record</u>. Her work (carried out with her 6-person team, see photo) 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 conduct 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.

CA Quits Project

This project comprises a partnership of 58 local health departments, 57 safety net hospitals, 23 Medi-Cal plans, and 169 public clinics that seek to reduce tobacco use through creating tobacco-topic "learning collaboratives" for safety-net clinic systems. Dr. Tong's 6-person team engages clinic personnel in discussions about how they can assess tobacco use, integrate evidence-based tobacco treatment, and improve quality performance. CHPR faculty members Ulfat Shaikh, Bimla Schwarz, and Patrick Romano are also part of the CA Quits team.

<u>eConsult Cessation</u> Services Project

In partnership with the Los Angeles County Department of Health Care Services, 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 U.S. with the largest population of tobacco users in the state. The cumulative impact of this intervention research will extend beyond California.

Additional tobacco cessation work carried out CHPR faculty members includes the following. Dr. Tong testified to the Sacramento City Council about the health risks of fruit-and menthol-flavored tobacco products which contributed to the City Council's decision to ban the sale of these products in Sacramento. Dr. Diana Cassady <u>informed tobacco policy for multi-unit dwellings</u>; Dr. Jeffry Hoch <u>calculated the economic impacts of tobacco cessation policy</u>; and Drs. David Cooke, Daniel Tancredi and Patrick Romano assessed thoracic surgeon <u>clinical practice regarding patient smoking cessation</u>. All of this actionable research informs clinicians, reforms policies to improve outcomes and quality of life, and reduces the costs of care.

Opioid Use/Addiction

More than a dozen CHPR faculty and fellows have been producing impactful opioid addiction research over the last seven years. For instance, Dr. Stephen Henry, mentored by Dr. Kravitz and Dr. Jerant, has been awarded three NIH grants and one Department of Justice grant in opioid research (see below). Examples of the research being conducted through CHPR on this important topic are given below.

Developing Patient-Level Risk Prediction Models for Prescription Opioid Overdose

Dr. Henry was awarded an NIH R01 grant in October 2017 to develop validated, patient-level risk prediction models for opioid-related overdose by linking statewide prescription, inpatient, and death certificate data in California. He and his team of CHPR staff partner 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 California will also be generalizable to the 48 other states that have PDMPs. Ultimately, this project advances a PDPM 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.

Informing a National Opioid Prescribing Guideline

Results from Dr. Henry's NIH-funded research into patient experiences with opioid tapering informed a national opioid prescribing guideline: HHS Guide for Clinicians on the Appropriate Dosage Reduction or Discontinuation of Long-Term Opioid Analgesics. This research filled knowledge gaps about patient experiences with opioid tapering in primary care. Dr. Henry and his CHPR team identified critical communication strategies for physicians to use to achieve productive, patient-centered discussions of opioid tapering. The clinical recommendations were published in the official journal of the American Pain Society. These strategies were used to design a stories-based opioid tapering intervention that will be tested in a future clinical trial.

Analysis of Rapid Opioid Tapering

A team of CHPR faculty and staff (Drs. Fenton, Agnoli, Xing, Tancredi, Jerant, and Magnan) found a significant increase in rapid opioid tapering between 2008 (12.7%) to 2017 (23.1%) among patients with commercial and Medicare Advantage insurance who were using long-term opioids. This research, led by Dr. Fenton and Dr. Agnoli in collaboration with partners at Optum Labs, identified a cohort of ~100,000 patients with commercial and Medicare Advantage insurance who had been prescribed long-term opioid therapy. The research team developed an algorithm for identifying opioid dose reduction among these long-

term users using pharmacy claims. Tapering was significantly more likely among women and patients with higher baseline opioid doses, and 26.5% of patients undergoing tapering had a maximum dose reduction rate exceeding 10% per week, which exceeds recommended tapering guidelines for long-term opioid users. Initial results were published in JAMA Network Open, and other findings are in preparation. Future work by this research team will examine racial/ethnic and gender disparities in opioid tapering. The team has obtained funding to develop a quality indicator of safe opioid dose tapering and anticipates starting this project in Fall 2020.

Other Substance Use Research

Other substance use research, conducted by members of the Department of Family and Community Medicine research group working with CHPR (Drs. Jerant, Franks, Melnikow, and Agnoli), has examined key factors related to prescription opioids and opioid risks. These include studies examining encounter-level factors associated with opioid dose increases during a patient's first year of opioid therapy for chronic pain, dose escalation during the first year of long-term opioid therapy for chronic pain, gender differences in prescription opioids, satisfaction with care among opioid-prescribed patients, cancer screening among women on opioids, the relationship between opioid prescriptions and physical and mental health, and the association between prescription opioids and short-term mortality. Each of these studies offered new insight into the complex risks and benefits associated with prescription opioids.

Challenges with Implementing the Centers for Disease Control and Prevention Opioid Guideline A consensus panel report co-authored by CHPR faculty member, Dr. Richard Kravitz, was published in *Pain Medicine*. The panel identified CDC guideline implementation challenges that included issues with application of dosage ceilings and prescription duration guidance, failure to appreciate the importance of patient involvement in decisions to taper or discontinue opioids, barriers to diagnosis and treatment of opioid use disorder, and lack of access to recommended comprehensive, multimodal pain care. The target audience for the guidelines includes leaders of regulatory agencies, legislators, public and private payers, and healthcare systems.

Conducted an Evaluation of Treatment Referral Program

CHPR faculty member Dr. Aimee Moulin, a UC Davis emergency medicine physician, is working with CHPR to conduct an evaluation of an emergency department treatment referral program for patients with substance use disorders. Dr. Moulin successfully advocated for



California State funding to support this intervention as a large-scale pilot program.

Created a Microsimulation Model to Project the Costs and Outcomes of Medicaid Patient Review and Restriction (MPRR) Programs In 2012, a CHPR team created a microsimulation model to project the costs and outcomes of Medicaid Patient Review and Restriction (MPRR) programs. These programs limit the number of prescribers and/or pharmacies that an enrollee can use to obtain prescription opioids. The microsimulation model supports interactive features that allow users to customize the population demographics and program enrollment criteria to compare projected outcomes and costs of specified policies within a Medicaid cohort. The computer model generated by this project is a tangible tool that can be used by policymakers and stakeholders to ascertain the cost and health impacts of MPRR policies.

Looking forward, CHPR seeks to leverage the important substance use research accomplishments highlighted above through its recently established Substance Use Workgroup for Addiction Research (SUGAR) to lay the foundation for pursuing federal program and center grants. SUGAR is an interdisciplinary network of UC Davis faculty from 13 departments in Davis and Sacramento who meet regularly to share ideas and develop transdisciplinary research proposals to address the healthcare needs of people with substance use disorders. SUGAR offers UC Davis researchers with career interests in SUD research a unique home in which to collaborate, train, and support dissemination of research findings to improve health outcomes, reduce disparities, and curtail costs associated with SUD. Support from the School of Medicine to coordinate SUGAR has been reduced, so unless additional funds to support the group administration are appropriated, the goal of developing a sufficient investigator base to compete for large center grants may not be reached.

Collaborators and Research Sponsors

Collaborations are a critical component of impactful research. CHPR builds significant partnerships with departments and centers at UC Davis and with external organizations including other educational institutions, foundations, and advocacy organizations. Growing numbers of researchers and research units representing diverse disciplines have sought collaboration with CHPR and its faculty members. In the last 3 years, CHPR has integrated researchers and their projects from two different organizations that dissolved (the UC Davis Institute for Population Health Improvement and the independent, non-profit Center for Health Care Decisions). That integration has expanded our capacity and expertise in community engagement. These and other CHPR collaborations enable CHPR to produce high-impact, meaningful research that is useful to and used by stakeholders and policymakers.

In addition to research partnerships and collaborations, CHPR faculty have received increased research funding from state, federal and private organizations over the years. (Examples of our funding sponsors are shown in the graphic above; see Chapter 1 for more information and Appendix 2 for a complete list of awards and sponsors.)



Conclusion

The breadth and depth of projects described in this chapter illustrate the unique role that CHPR plays in supporting and fostering interdisciplinary collaboration among researchers and stakeholders within the University, other academic institutions, the community, and other private and public entities. CHPR provides a nexus for investigators with a broad range of expertise to collaborate on impactful research that informs healthcare delivery, quality, outcomes and costs.

4. Education, Training, and Career Development



Chapter Snapshot

CHPR's robust research training and career development portfolio fosters career development, networking and collaborative research opportunities for faculty and trainees from multiple disciplines across UC Davis and with our local, state, national, and international communities. Since 2005, CHPR has trained postdoctoral fellows in outcomes research supported by three federally funded training grants, and mentored graduate and undergraduate students within and beyond UC Davis. CHPR researchers teach courses in the School of Medicine and School of Nursing, as well as in the Graduate Groups in Epidemiology, Clinical Research, Health Informatics, Public Health Sciences and Nursing Science and Healthcare Leadership. Additionally, CHPR faculty members have developed and launched new courses (classroom and on-line) in health economics and cost-effectiveness analysis over the last 10 years. CHPR researchers also engage trainees in "hands-on" research experience through internships and assistantships. CHPR hosts conferences, seminars, and a journal club as additional means of training for students, staff, and faculty of all levels. Finally, CHPR has a long tradition of mentoring and CHPR members continue to be active mentors of students, fellows, and junior faculty.

Education and Training

Post-Doctoral Fellowship Programs

Training and career development are core components of CHPR's value. Over the last 15 years,

CHPR has been the home of three federally funded post-doctoral training programs, training 40 fellows. In 2003, CHPR launched its first post-doctoral fellowship program – the Primary Care Outcomes Research (PCOR) fellowship program – funded by the Health Resources and Services Administration (HRSA), with support from the Dean of the School of Medicine and participation from the Departments of Family and Community Medicine, Internal Medicine, and Pediatrics. The fellowship was funded through 2012, when the federal government refocused its research training





programs. Subsequently, CHPR received funding through the Agency for Healthcare Research and Quality (AHRQ) in 2013 for a newly developed, five-year fellowship program – the Quality, Safety, and Comparative Effectiveness Research Training (QSCERT) fellowship program. This postdoctoral program reflected the expanded mission of CHPR into interdisciplinary comparative effectiveness research. Most recently, CHPR received funding for the 5-year Quality, Safety, and Comparative Effectiveness Research Training in Primary Care (QSCERT-PC) program from HRSA. QSCERT-PC is interprofessional and

multidisciplinary at its core, with leaders, mentors, and trainees drawn from all primary care disciplines, the Betty Irene Moore School of Nursing, the Department of Public Health Sciences, and Graduate Groups in Epidemiology, Economics, Biostatistics, and more. Details on the CHPR trainees appear in Appendix 4.

The mission of the QSCERT-PC program is to prepare family physicians, general internists, general pediatricians, nurse practitioners, physician assistants, PhD-prepared nurses, and PhD-prepared social and quantitative scientists for careers as outstanding primary care researchers, focusing on quality and safety in primary care, and on the comparative effectiveness of primary care and system-level interventions. Through training in the clinical, statistical, and social sciences in a vibrant

"CHPR is truly an amazing place to "grow up" as a researcher. My fellowship training is where I laid the foundation of research that I continue to build upon today, where I started connections and collaborations that blossomed and grew during my first faculty years, and where I continue to turn for guidance when I am at a loss."

~ Emily White Vangompel, MD, MPH, Family Medicine, North Shore University Health System

interprofessional, multidisciplinary environment, QSCERT-PC trainees acquire the skills and experience they need to make important contributions to primary care research by addressing issues of healthcare quality, costs, and population health. Our QSCERT-PC fellows will educate the next generation of primary care researchers and will serve as role models in improving care for culturally diverse, underserved populations.

CHPR collaborates with the Clinical and Translational Science Center (CTSC) in fellowship training, as many fellows are also in the Mentored Clinical Research Training Program (MCRTP) offering a Master's Degree in Advanced Studies. CHPR fellows may take advantage of relevant courses even if they are not enrolled in the degree program.



Dr. Lindsey Woodworth is one example of the career trajectory of CHPR's interdisciplinary fellowship trainees. After completing her PhD in economics, Dr. Lindsey Woodworth became a QSCERT fellow at CHPR. Focusing on care in the emergency department (ED), she published original research on the effect of ED wait time on the cost of care, estimating that prolonging the wait of a patient who arrives with a serious condition by 10 minutes will increase the hospital's cost to care for the patient by an average of 6%. Dr. Woodworth also published work on the association between insurance status and a patient's

hospital charge, finding that compared with those with no insurance, patients with private insurance received hospital bills that were an average of 10.7% higher and patients with Medicare received bills that were an average of 8.9% higher relative to the uninsured. Dr. Woodworth contributed to a study of access to primary care new patient appointments and its association with ED use by Medi-Cal enrollees. The published study, led by Dr. Melnikow,

involved multiple QSCERT fellows and found that in contrast to findings from other states, access to primary care in Northern California was limited for new patient Medi-Cal enrollees and varied across counties, despite standard statewide reimbursement rates. Counties with more limited access to primary care new patient appointments had higher ED use by Medi-Cal enrollees.

At the completion of her fellowship, Dr. Woodworth was appointed Assistant Professor of Economics at the University of South Carolina, where she continues her work applying econometric techniques to understand how healthcare organization affects health outcomes.

Teaching Graduate and Undergraduate Students

CHPR members are also involved in teaching graduate and undergraduate students, providing a critical link between the clinical world in Sacramento and the education and research world in Davis. CHPR is an essential node, providing research training and networking opportunities for students of all kinds on both sides of the Yolo Causeway. Whether it is the graduate student who requires an applied setting or the undergraduate who wants research experience, CHPR delivers an educational experience not available anywhere else at UC Davis.

CHPR members are actively engaged in classroom teaching on both UC Davis campuses in areas relevant to the mission of CHPR. For example, Dr. Patrick Romano leads the introductory course on clinical research design for all trainees within the Mentored Clinical Research Training Program (MCRTP; CLH 202). Dr. Jeffrey Hoch leads the required course on Health Services for the University's MPH program (SPH 273) as well as a survey class for undergraduates on health economics and health policy (SPH 103). Dr. Tancredi's seminars and guest lectures to UC Davis graduate students frequently address topics in health services and health policy research.



Melissa Gosdin, PhD leads educational sessions on qualitative methods in health research. Besides independent study experiences that Dr. Gosdin has mentored for graduate students in Public Health Sciences program, she has taught multiple CHPR QSCERT post-doctoral fellows qualitative and mixed research methods and published peerreviewed papers with many of them (e.g., Consumers' Perceptions And Choices Related To

Three Value-Based Insurance Design Approaches). Dr. Gosdin has also played a crucial role in

introducing undergraduate students to qualitative research, a good example being a class she co-taught with Dr. Romano for 41 undergraduate students. The undergraduate students (photo) completed human subject research protection training and were taught qualitative data collection and analysis research methods at CHPR prior to conducting 104 interviews with patients from all seven UC Davis student-run clinics and the Gender Health Center, a professionally managed clinic that provides care for the LGBTQQI community. After the interviews were transcribed and



translated from six different languages, students coded the transcripts and then Dr. Gosdin and the students identified major themes. Three of the participating undergraduate students are conducting follow-up research studies related to the original project.

CHPR-affiliated faculty are Instructors of Record (IOR) or co-IORs for:

- CLH 202 Introduction to Clinical Research
- CLH 203 Methods in Clinical Research
- CLH 211 Critical Assessment of the Biomedical Literature
- MDS 415 A/B/C (Population Health, Evidence-Based Medicine, and System Science)
- CLH 210Y Principles & Methods of Comparative Effectiveness Research
- SPH 103 Survey of Health Economics, Services, Policy, Administration & Management
- SPH 273 Health Services Administration
- SPH 274 Economic Evaluation in Healthcare
- SPH 276 Critical Assessment in Health Policy & Economics
- SPH 277 Net Benefit Regression
- SPH 291 Public Health Sciences Doctoral Seminar
- EPI 291 Seminars in Health Services Research



CHPR faculty, in partnership with the UC Davis Clinical and Translational Science Center and with NIH funding, developed CLH 210Y, a hybrid graduate-level course that has been offered annually since 2010 (entirely on-line in 2020). Its open access online course materials in comparative effectiveness research methods are used by researchers across the nation to train students in these techniques.

CHPR faculty and staff regularly provide guest lectures in a variety of courses at the health and main campuses including Clinical Epidemiology and Study Design, Topics in Public Health, and Qualitative Methods.

Individual CHPR faculty members are also very active teacher/mentors in multiple UC Davis



Graduate Groups. For example, Dr. Tancredi, Associate Professor of Pediatrics, is especially active in the following UC Davis Graduate Groups: Biostatistics, Clinical Research, Epidemiology, and Nursing and Health Sciences Leadership. In each of these groups, Dr. Tancredi has had trainees and dissertation mentees conducting empirical and methodological research directly motivated by or pertaining to health services and health policy. He has had 11 graduate students (10 doctoral, one masters) as thesis advisees and 8 post-doctoral research mentees in the past 5 years.

Research Experiences for Graduate and Undergraduate Students

In addition to teaching courses, CHPR faculty supervise and mentor UC Davis graduate and undergraduate research experiences and CHPR extends its training opportunities to undergraduate students through research assistantships. Undergraduates have, for example, participated in numerous CHPR projects over the years, including Dr. Melnikow's research synthesis on supplemental breast cancer screening for women with dense breasts, and access to care for primary care Medi-Cal recipients. These roles have inspired some to pursue careers in health services research; former UCD student Hiba Naz has joined the CHPR staff, for example, and Sabrina Loureiro is currently a Student Research Assistant at CHPR. Former summer student intern Kunal Shah completed his Bachelor's degree at Columbia University and is applying to medical school.

David Chin, PhD began working with Dr. Patrick Romano as a graduate student at UC Davis,

conducting research on health care quality metrics including the Medicare 30 day readmission standard for hospital quality and outcomes of care from hospitalists vs academic hospital care teams. Inspired by this work at CHPR

"Throughout my training as a graduate student and postdoctoral fellow, CHPR provided me with a home for scholarship, empowering me with a range of interdisciplinary collaboration opportunities.... CHPR also provided me with extraordinary mentorship that created an opportunity to build the methodological and experiential foundation necessary for my current position on the faculty at the University of Massachusetts Amherst in the School of Public Health and Health Sciences."

~David Chin, PhD Assistant Professor

and his exceptional mentor, he enrolled in the QSCERT postdoctoral program, and subsequently joined the faculty as an Assistant Professor in the Department of Health Promotion and Policy at UMass Amherst.

Teaching International Scholars

CHPR has maintained an ongoing, collaborative relationship with York University, United Kingdom. York scholars complete their master's degree in Health Economics by carrying out a capstone project. Five scholars have completed their capstone projects through an internship at CHPR, and received valuable, applied experience at the same time by working with CHPR faculty doing cost effectiveness modeling. For example, Elise Evers, a graduate student at the University of York (see photo), worked as a summer intern at CHPR with Dr. Hoch. She wrote her MSc thesis based on

the Markov model on new medications for amyloidosis developed for the Institute for Clinical and Economic Review (ICER). As another example, Dr. Logan Trenaman, who completed his PhD in Health Economics from the University of British Columbia, came to CHPR in 2018 to do his post-doctoral work with Dr. Hoch. Together they have published work studying ICER's use of cost-effectiveness analysis and have illustrated the advantages of the net benefit regression.



CHPR Seminar Series

Patient-Centered Outcomes Research Design Seminar Series

This seminar series serves as a patient-centered outcomes research (PCOR) methods workshop. It is an informal, one-hour gathering held twice a month for postdoctoral fellows but is also open to anyone with an interest in PCOR methods and comparative effectiveness research (CER). Regular session attendees have expressed enthusiasm for the program and its usefulness. For example, Dr.



Tejveer Dhillon, a former surgery resident and fellow in the CHPR Quality, Safety, and Comparative Effectiveness Research Training program (QSCERT), told us, "The methods workshops are an excellent resource because we get to work

almost one-on-one with two great leaders in the field of medical research." He continued, "Dr. Melnikow has extensive

experience in many aspects of the research field and offers an expert perspective on how to improve the designs of our individual research projects."

CHPR faculty member Stephen Henry, Associate Professor in the Division of General Medicine, Geriatrics and Bioethics, appreciated the opportunity to improve his skills and meet other outcomes researchers. "The sessions are one of the few venues on campus that bring together outcomes researchers from different departments and

"Dr. Melnikow has extensive experience in many aspects of the research field and offers an expert perspective on how to improve the designs of our individual research projects."

~ Tejveer Dhillon, a former surgery resident and fellow in the CHPR Quality, Safety, and Comparative Effectiveness Research Training program (QSCERT)

schools across UC Davis. I have met new researchers from pediatrics, public health

plan. Discussing study design...has helped me to avoid a couple of 'rookie mistakes' for my early projects."

sciences, and surgery." Dr. Henry added, "As a junior faculty member, these sessions have allowed me to get substantive individualized feedback on my research

CHPR faculty member Daniel Nishijima, Associate Professor of Emergency Medicine, appreciated the opportunities for examining actual research questions and problems brought by the attendees. "These sessions are a great resource to researchers," he said. "Even if one does not have a specific question for the day, these sessions provide an excellent opportunity to learn about patient-centered outcomes research."

"As a junior faculty member, these sessions have allowed me to get substantive individualized feedback on my research plan. Discussing study design...has helped me to avoid a couple of 'rookie mistakes' for my early projects."

~Dr. Stephen Henry CHPR Faculty Member, Associate Professor in the Division of General Medicine, Geriatrics and Bioethics, UC Davis

CHPR Health Services Research Seminar Series

CHPR also offers a weekly Health Services Research seminar series. This series often features

The audiences for this seminar series include clinicians and researchers from more than 20

speakers from other institutions whose research and policy presentations relate to health services research. This seminar series focuses on:

- Research-in-progress
- Recently completed research
- Innovative research methods
- Discussions of grant proposal ideas

very engaging."

Practice presentations



"In terms of professional development, I have found the weekly CHPR seminars extremely informative. They have great speakers and topics that have been

~Theresa H Keegan, PhD, MS, Associate Professor UC Davis Comprehensive Cancer Center, UC Davis different departments; medical, nursing and graduate students; UC Davis staff; and state agency staff from: the Office of Statewide Health Planning and Development (OSHPD), Department of Health Care Services (DHCS), and the California Department of Public Health (CDPH). Due to the COVID-19 pandemic, this CHPR Seminar Series has transitioned to being conducted online. This will also allow those interested in health services research from outside our local community access to speaker recordings and thus may expand our audience from local researchers to researchers around the world.

CHPR seminar presentation have covered a diverse array of topics:

How to Influence the California Legislative Process as a Researcher

Results from a Randomized Trial of a Clinician Communication Training Intervention to Improve Processes and Outcomes of Care Related to Chronic Pain in Primary Care

Trends and Outcomes of Dose Tapering Among Patients on Long-Term Opioid Therapy

The Science of Science Communication: Informal Strategies for Public Engagement

Prior Authorization: Political Lotions, Potions and Elixirs of the Healthcare System

Perspectives on Pregnancy, Contraception, and Abortion among Young Men Involved in the Juvenile Justice System

Are Tobacco 21 Policies Associated with Changes in Tobacco Prevalence

Patient Engagement with eConsults: Lessons from a Mature Safety Net System

Risk-stratified Breast Cancer Screening to Improve the Balance of Benefits and Harms

Minimum Wages and Public Health: Natural experiments to test for effects

Privacy, Ethics and Personalized Health

The Application of Trauma-informed Principles while Conducting Research

The use of Telemedicine in Emergency Departments to provide Pediatric Critical Care Consultations

Improving Health Outcomes Through Enhanced Patient-Clinician Relationships

More details about this CHPR seminar series are available in Appendix 8 and on <u>CHPR's seminar</u> <u>webpage</u>.

Mentoring and Career Development

CHPR's leadership in the applied health research educational mission of the University is valuable not only in the sense that it trains future researchers, but also by virtue of the new knowledge that is created from the training process. CHPR's comparative effectiveness research methods course requires a team walk through the steps of a systematic review as the final project. Some students have gone on to complete and publish this work (e.g., reviews of <u>platelet transfusion in adult patients with traumatic intracranial hemorrhage</u>, as well as <u>psoriasis and the risk of diabetes mellitus</u>).

Mentoring Junior Faculty

CHPR has a strong record of mentoring junior faculty. Numerous junior faculty at UC Davis identify mentoring by CHPR faculty over the years as a key element of their research success. Additional examples include Dr. Elaine Waetjen (Ob/Gyn), Dr. Eric Fernandez y Garcia (Pediatrics), Dr. Daniel Nishijima (Emergency Medicine), Dr. Misty Humphries (Vascular Surgery), Dr. Elena Siegel (School of Nursing), Dr. Elisa Tong (Internal Medicine), Dr. Claire Manske (Orthopedics), Dr. Jennifer



Rosenthal (Pediatrics), Dr. Ulfat Shaikh (Pediatrics), and Dr. Stephanie Crossen (Pediatrics).



Stephen Henry, MD, MPH, is a highly successful, mid-career clinician and scholar. He has been mentored through CHPR since he joined UCD in 2012. His research interest is focused on in the intersection between doctor-patient communication, chronic pain, and opioid prescribing. He currently leads four large-scale opioid addiction research projects: one funded by the US Department of Justice, and three by the National Institutes of Health, National Institute of Drug Abuse. Dr. Henry has developed and staffed all of these projects through CHPR. His research filled knowledge gaps about patient experiences with opioid tapering in primary care and informed the U.S. Health and Human Services Guide for Clinicians on the

Appropriate Dosage Reduction or Discontinuation of Long-Term Opioid Analgesics. The <u>clinical recommendations</u> were published in the official journal of the American Pain Society. Recently Dr. Henry was awarded an NIH R01 grant to develop risk prediction models for prescription opioid overdose. Dr. Henry provides mentorship to several graduate students and postdoctoral fellows at CHPR (see Appendix 4). They have <u>contributed to the literature</u> regarding risk and dose trajectory for patients receiving their first opioid prescription. Additional <u>published research</u> confirmed that a rising dosage trajectory within that first year was associated with higher indicators of dependency, and subsequent substance use diagnoses.



Dr. Tara Niendam received her PhD in Clinical Psychology from UCLA and started as an Assistant Professor at UC Davis in the Department of Psychiatry and Behavioral Sciences in 2008. As Director of Operations for the Early Psychosis Programs (EDAPT and SacEDAPT Clinics) from 2011 – 2016 she worked with Dr. Melnikow to develop a research program in evaluation and implantation of evidence-based care for early psychosis. Dr. Niendam has published with CHPR staff assisting with qualitative analysis, quantitative analysis and provider perspective.

Numerous other junior faculty at UC Davis identify mentoring by CHPR faculty over the years as a key element of their research success. Additional examples include Dr. Elaine Waetjen (Ob/Gyn), Dr. Eric Fernandez y Garcia (Pediatrics), Dr. Daniel Nishijima (Emergency Medicine), Dr. Misty Humphries (Vascular Surgery), Dr. Elena Siegel (School of Nursing), Dr. Elisa Tong (Internal Medicine), Dr. Claire Manske (Orthopedics), Dr. Jennifer Rosenthal (Pediatrics), Dr. Ulfat Shaikh (Pediatrics) and Dr. Stephanie Crossen (Pediatrics).

Pilot Funding for Research Development

Early support for collection of preliminary data is crucial to enable successful competition for extramural funding, especially for early career researchers. As funds have been available, CHPR has supported pilot research projects in areas consistent with our mission; these small grants allow awardees to generate preliminary data to improve their opportunities to compete for extramural funding. We have collaborated on these initiatives with various other schools and centers at UC Davis to increase the funding pool and enhance the interdisciplinary nature of the funded projects. CHPR's most recent collaborative pilot funding effort, conducted in response to the COVID-19 epidemic, is described in the **Chapter 1** section on COVID-19.

In 2014/2015, in collaboration with the School of Medicine, CHPR funded the Outcomes Research Pilot Awards which were focused on Patient-Centered Outcomes Research. Recipients and topics included:

Award Recipient	Project Title	Department
J. Bell	Novel personal health network technology to enhance nurse-directed early palliative care for cancer patients: a pilot study to establish a randomized clinical trial	Betty Irene Moore School of Nursing
L. Dalrymple	Ensuring safe transitions from the hospital to the outpatient dialysis center	Internal Medicine
G. Xiong	Antipsychotic prescription decision making and use in a diverse cohort of dementia patients	Psychiatry and Behavioral Sciences

(Additional information on prior pilot funding programs is available in the reports from the two previous reviews of our ORU.)

Conclusion

Training the next generation of health services researchers is a top priority for CHPR. Over the past 15 years, we have identified, trained, and mentored many students, fellows and junior faculty and helped to launch their research careers. Our formal and informal training programs have supported students, fellows and junior faculty in developing successful academic careers that will contribute to improving health outcomes, access, quality and costs. Through its educational and career development efforts, CHPR nourishes the intellectual environment for health services research at UC Davis and prepares faculty, trainees, and staff with the skills they need to conduct first-class health services and policy research.

5. Impacting Public Policy and Health



Chapter Snapshot

CHPR bridges the gap between producing nuanced research findings and the need to supply policymakers with clear, unbiased evidence. Our faculty and staff understand how to work with the "big picture" framework and tight timelines under which policymakers operate and have years of experience doing so. CHPR faculty and staff are experts in providing research results and policy analyses in a form decision makers can use for organizations like:

- United States Preventive Services Task Force (USPSTF)
- California Health Benefits Review Program (CHBRP)
- Agency for Healthcare Research and Quality (AHRQ)
- Institute for Clinical and Economic Review (ICER)

In addition to conducting conventional health policy research, CHPR also translates its quantitative and qualitative research, and research syntheses, into clear, concise policy-relevant material that can be used for timely application by policymakers and stakeholders. Although comparative effectiveness, quality measurement, health economics, and health services research all require complex methodologies, our faculty and staff know how to communicate results in jargon-free language and graphic presentations in order to facilitate evidence-based policymaking. We create executive summaries, policy briefs, PowerPoint presentations, infographics, and in-depth white papers that convey important, non-partisan research findings. We then widely disseminate those findings and policy analyses, a final critical step in promoting evidence-based policymaking. To do so CHPR hosts seminars, conferences, provides expert testimony, and publishes a newsletter— in addition to publishing in traditional peer-reviewed publications. CHPR faculty members also impact public policies by serving as experts on national and state committees, forums and panels. This chapter summarizes some of the impacts CHPR's research and dissemination efforts have had. (Additional impacts of CHPR's research and synthesis efforts are described in **Chapter 3**: Interdisciplinary and Collaborative Research Programs.)

Introduction

In addition to substantial time spent on research, teaching, and patient care, CHPR members devote time serving public agencies and non-profit research organizations, as well as disseminating and translating research to inform public policy. The ways in which CHPR impacts public policy and national and local public health are described below.

Serving on Influential Boards and Committees

Many CHPR researchers serve public agencies and nonprofit health and research organizations, including serving on national and international boards of advisors, editorial boards of scientific journals, as well as on numerous study sections for federal health organizations. They provide



guidance to professional societies and other academic health policy research groups. Examples include: Dr. Romano's recent appointment to the National Advisory Council to the Agency for Healthcare Research and Quality (AHRQ), which provides advice and recommendations to the AHRQ Director and to the Secretary of the HHS on priorities for its health services research agenda regarding quality, outcomes, and cost-effectiveness of clinical practice. Dr. Melnikow was a member of the US Preventive Services Task Force (USPSTF) from 2009-2012 and is a current Advisory Committee member of the Medicare Evidence Development & Coverage (MEDAC).

In the area of health technology assessment, CHPR members and staff (Dr. Hoch, Dr. Melnikow, Dr. Kohatsu and Patricia Powers) participate on the California Technology Assessment Forum (CTAF), a core program of the Institute for Clinical and Economic Review (ICER), a nationally-recognized independent nonprofit that evaluates benefits, costs and harms of new pharmaceuticals and



interventions, with a structured process of public input. CTAF convenes three times each year at public meetings to review objective evidence reports and develop recommendations to improve the quality and value of new healthcare interventions.

Several CHPR core faculty members have served, or currently serve, as editors of respected medical journals. Dr. Richard Kravitz is Editor-in-Chief of the *Journal of General Internal Medicine*, and CHPR staff support him in this work. Dr. Hoch serves on the Editorial Board of Health Care Management Science, which publishes research about healthcare delivery, healthcare management, and healthcare policy. Dr. Romano served as co-editor-in-chief of *Health Services Research* journal for six years.

Conducting Reviews, Research Syntheses and Analyses for Policymakers

As mentioned elsewhere in this report, Drs. Melnikow and Hoch, other CHPR faculty and CHPR staff members have been active in informing public policy through their service to the California



Health Benefits Review Program (CHBRP). Through its work with CHBRP, CHPR has provided medical effectiveness, public health impact and cost analyses of health insurance legislation for the California State Legislature for 15 years. CHPR members have contributed to more than 80 CHBRP reports on topics such as contraceptives, digital breast tomosynthesis, and abuse-deterrent opioids (see Appendix 6).

CHPR also contributes to research dissemination and informing policy by leading and contributing to systematic reviews for the USPSTF, nationally and internationally recognized as a leading source of evidence-based guidelines on clinical preventive services. As described in more detail in

Chapter 3 (pg. 34), Drs. Melnikow and Fenton, with CHPR staff and other colleagues, have led systematic reviews of available research evidence that have informed USPSTF guidelines on breast, cervical, and prostate cancer prevention measures, among others.



Providing Presentations and Testifying to Decisionmakers

CHPR also informs California's state health policies through in-person testimony to the legislature. Examples include:

Jeffrey Hoch, PhD & Dominique Ritley, MPH "State Prescription Drug Purchases: Pricing Standards and Initiative Statute," presented to the Joint Informational Hearing Senate Health and Assembly Health Committees, Sacramento, California, May 2016.



Jeffrey Hoch, PhD

"Impact of Rising Drug Costs on Public and Private Payers: Emerging Policy Issues," Informational Hearing, Assembly Health Committee, Sacramento, California, February 2017.

"The economics of pharmaceuticals: Why do drugs cost so much?" Informational Hearing, Assembly Health Committee, Sacramento, California, October 2016.

Aimee Moulin, MD

Dr. Moulin shared evidence that direct referrals to treatment in the emergency department can increase enrollment rates in SUD treatment by as much 50 percent, thus demonstrating the need for placement of a certified drug and alcohol counselor in every emergency department. Senate Budget Subcommittee #3 - Part 2, April 2018.

CHPR also informs state policy through presentations made to other California decision makers:

Jeffrey Hoch, PhD	"An introduction to Cost-Effectiveness Analysis to promote sustainability and accountability," presented to the California Department of Finance, Sacramento, CA, February 2018.
	"Health economic analysis of California Senate Bill 870," Pharmacy Benefits Division, Department of Health Care Services, Sacramento, California, August 2018.
Jeffrey Hoch, PhD & BK Yoo, PhD	"Health Economic Evaluation Training and Interpretation Training: 101 (for Managers)," a 3-hour presentation to senior staff and

managers at the California Department of Public Health, May 2017.

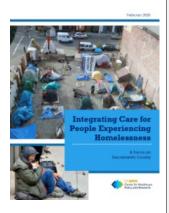
"Health Economic Evaluation Training and Interpretation Training: 201 (for Analysts)," two 3-hour presentations given to Research staff and managers at the California Department of Public Health, May 2017 and June 2017.

These invited educational workshops led to better understanding of the research results, and remind a core target audience about CHPR's capacity to conduct and disseminate research.

Reports on Local Health Issues

CHPR faculty also work with community-based organizations to address community-related health disparities and concerns. With funding from the California Health Care Foundation and from UC Davis Health, CHPR members and staff, in collaboration with faculty at California State University Sacramento, recently prepared two reports on the current situation and potential options for integrated care of people experiencing homelessness in the Sacramento region. Results were presented to local stakeholders to inform community discussion of the problem and possible solutions. Preparation of these reports involved close collaboration with key stakeholders (e.g., community leaders, hospital executives, clinicians and researchers).

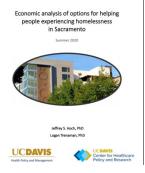
Integrating Care for People Experiencing Homelessness: A Focus on Sacramento County



In collaboration with Office of the Vice Chancellor and the Sierra Health Foundation, CHPR published a report to support a community effort (involving Sacramento City and County, 4 hospital systems, housing advocates, business leaders, etc.) to address poor health outcomes for people experiencing homelessness in Sacramento County.

In conjunction with subcontractors from CSU-Sacramento, CHPR's report provides information about the baseline situation in Sacramento, evidence on effectiveness of innovative options for integrating housing, healthcare, and social services for the chronically homeless, and a review of existing models. The results were disseminated via a report and public presentation, both available on the CHPR website.

Economic Analysis of Options for Helping People Experiencing Homelessness in Sacramento



CHPR's Associate Director Hoch led an economic analysis that examined the comparative value of different options to help people experiencing homelessness in Sacramento. The work, published as a report, was distributed to community leaders and decision-makers.

A white paper presented to the Sacramento City Council on the subject of flavored tobacco products by Dr. Tong and colleagues. That report's research_was integral to the City of Sacramento's decision, effective January 1, 2020, to ban city sales of those products. The Council also received information presented by a panel of UC Davis and community health experts, including Dr. Tong, at a roundtable event held at the UC Davis Comprehensive Cancer in March 2019.

A CHPR-prepared report established the evidence base for addressing regional concerns on improving options for healthy aging. The Community for Health and Independence report, prepared by CHPR in 2018, explored the prospect of a public-private partnership with a local developer to develop an innovative planned community focused on healthy aging-in-place for vulnerable adults. CHPR faculty and staff described the regional demographics, existing resources for older and vulnerable adults, examples of model communities, and provided a rapid review of evidence on use of technology, the built environment, and community-based interventions to facilitate aging in place. CHPR staff solicited the perspectives of faculty from multiple departments in preparing this report and identified how such a partnership related to the UC Davis mission. Challenges and opportunities for research, education, and community partnership that were identified by UC Davis faculty were also included. This report lays the groundwork for continued work between UC Davis and UC Davis Health leadership, the UC Regents, and the developer.

"CHPR has always been an excellent resource for quickly evaluating the utility of novel interventions as part of research projects. We have enjoyed the opportunity to work with CHPR to use their expertise in literature review, evaluation, report generation and thought leadership to drive positive change in healthcare."

~Tod Stoltz, MBA
Director of Business Development and International Affiliations,
UC Davis Health

Policy-Relevant Conferences

CHPR convened conferences on topics highly relevant to policy makers, held at the UC Sacramento Center, conveniently located to the Capitol and many state offices. Designed to

bring timely, accessible, policy-relevant evidence to regional and state policy staff and officials, these conferences brought together diverse audiences and sparked informative discussion.

In 2015, CHPR co-sponsored with CHBRP and the Sacramento Center a conference on the implementation challenges of healthcare reform in Massachusetts: Lessons from Massachusetts for the Next Phase of Health Care Reform: 58% of Previously Uninsured Californians Have Insurance – Now What? This conference of over 100 attendees targeted state policy makers and staff charged with implementing healthcare in California.

In 2018, CHPR and California State University faculty presented results of our analysis of potential solutions to care for people experiencing homelessness in the Sacramento region: Homelessness, Health and Integrating Care: Options for Integrating Behavioral Health, Medical Care, and Housing. Also held at the UC Sacramento Center, over 100 attendees from local, regional and state government, nonprofits, and UC Davis faculty and students engaged in important discussions on the challenges and options for providing help and support to the thousands of unhoused people in the Sacramento region.

Engaging Communities in Health-Related Research

Community engagement is a growing area of focus for CHPR, as recent collaborations have enhanced and expanded our resources and expertise in working with community members. In addition to the ongoing community engagement projects described below, Dr. Melnikow has collaborated on other research projects that engaged community members with: Save Ourselves (a women's breast cancer organization), the American Cancer Society, the Healthy Sacramento Coalition, and the Health Education Council during this review period.

Center for Healthcare Decisions (CHCD)



Role of Public Deliberation in Exemption from Informed Consent. CHPR/CHCD staff helped emergency medicine physicians obtain an exemption from informed consent (EFIC) for a pediatric trauma RCT through use of the process/method of Public Deliberation. Convening 8 community groups from zip codes with the highest number of UC Davis pediatric trauma visits, CHPR faculty and staff facilitated deliberative discussions about choices and concerns parents might have regarding the study to inform researcher tactics to improve research design and meet IRB standards for EFIC. Sessions included education about research methods and study design. The project resulted in a publication that illustrated the utility of using deliberation methods to meet requirements for exemptions from informed consent.

Population Health Group (PHG)



PCORI Family Advisory Board

The Population Health Group (PHG) joined CHPR in 2020 after the dissolution of the Institute for Population Health Improvement. CHPR is home to the KOA Family project, led by Dr. Neal Kohatsu and Dr. Desiree Bachman. This community-based randomized, controlled trial of "whole person engagement" seeks to reduce obesity in lowincome communities. The intervention, recently adapted to provide a virtual version, includes weekly online meetings over a 6-month period among 190 low-income mothers to establish "micro-communities" that will support one another in healthful eating, physical activity, mindfulness and meditation, coping with stress, connecting to local resources, and building a growth mindset. Funded through the US Department of Agriculture, the study goal is to support healthier and more resilient, mindful, and empowered mothers. Outcomes that will be analyzed include changes in Body Mass Index, diet, physical activity, and quality of life, measured at 3, 6, 9, and 12 months from baseline. An economic analysis also will assess the cost-effectiveness of the Koa Family intervention, and qualitative methods will be used to identify potential mediating factors related to study outcomes.

CHPR was solicited to develop the Family Advisory Board for the Center for Health Technology's PCORI grant, which will compare the addition of virtual pediatric ED trauma care to standard ED trauma care for children among 10 partner hospitals in Northern California. PCORI funding requires researchers to include patients (or parents/guardians in this case) on the research team. CHPR will educate the FAB members on research design and methods, the study goals, and will facilitate discussions between clinician researchers and FAB members on improving the study design, readability of study materials, and enrollee retention.

Conclusion

CHPR faculty and staff have consistently translated research evidence on health outcomes, access, quality and costs into products that can be effectively used by federal, state and local policymakers for decision making. They have created rigorous, accessible, clearly written briefs, online information, and oral presentations to support this work. Core CHPR faculty also impact public policy and health through the important positions they hold in state and national advisory groups and task forces, and as editors of key journals that publish health services research. CHPR

is playing a growing role for UC Davis in engaging community members in health-related research and has expanded staff and expertise in this area over the past three years. Work by CHPR faculty and staff connects the University to the community in efforts to translate rigorous evidence into public health improvements.

6. Communication and Outreach



Chapter Snapshot

CHPR uses a variety of tools to communicate our services, expertise, and research results. Our website, newsletter, and open house events provide the public face for our outreach efforts to target researchers and stakeholders interested in health policy, comparative effectiveness, patient-centered outcomes, and health services research. This chapter describes how CHPR's research, analyses and policy products are made available to CHPR members, staff, the UC Davis community, potential collaborators, decision makers, other healthcare professionals, and the wider public.

CHPR Website

Our website audience is in search of a broad array of information about CHPR and our services, programs and expertise. We also strive to have our website serve as a repository for all of CHPR's work products, from publications to research briefs to videos of presentations. To better support the needs of our users, the CHPR website was recently overhauled to make it more intuitive, informative, and visually appealing.

As a result, enhanced navigation tools enable users to quickly access frequently used or frequently updated items such as membership application forms and upcoming events. The website will also be releasing additional tools and resource libraries to provide a hub for healthcare quality research and policy resources, publications, and education tools. **Figures 9 and 10** show CHPR website traffic has been relatively constant from 2014-2020, which most viewers arriving though search engines.



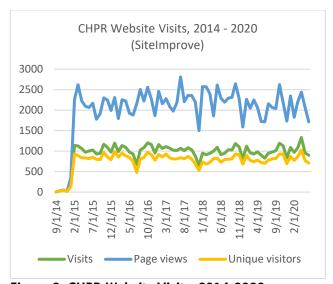


Figure 10. CHPR Website Traffic, 2014-2020

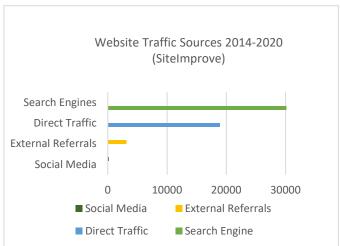


Figure 9. CHPR Website Visits, 2014-2020

CHPR on Social Media

CHPR's presence on social media includes accounts on Twitter, Facebook, and Linkedln. We are expanding our use of social media to promote CHPR events, job postings, recent news about CHPR project results and publications, and information on the research of CHPR faculty members, staff and postdoctoral fellows. Social media has been an effective tool for widening CHPR outreach and gaining more brand awareness.



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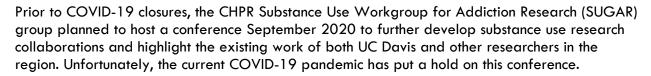
CHPR Newsletter

CHPR's newsletters provide regular, targeted information to researchers and stakeholders interested in our work. The newsletters keep recipients informed about members' recent research accomplishments and recent events held by CHPR. CHPR's newsletter has evolved over the past five years from a quarterly printed edition sent to a limited number of readers to a more indepth electronic version distributed via email to more than 600 people.

CHPR Events

Before the COVID-19 pandemic, students, fellows, and researchers could meet face-to-face and network at events organized or attended by CHPR staff. These CHPR events cultivated multidisciplinary research collaborations. The CHPR Seminar Series showcases research in progress or recently completed by CHPR faculty, postdoctoral fellows and other members of the health services research community. CHPR also participates in the annual UC Davis Research Expo held on the UC Davis Campus and at the UC Davis School of Medicine, which increase awareness of CHPR among current staff, faculty, and students at the University.

- CHPR has hosted intermittent topical research conferences over the past 15 years, including:
- o Bridging the Causeway
- Comparative Effectiveness Research: Methods and Controversies
- o Targeted and Tailored Messages for Dealing with Depression
- O Surgical and Trauma Outcomes Research: Current Status and Future Directions.



Conclusion

CHPR's current online presence, combined with past and future health policy research events, is an effective means for introducing the Center's research and evidence syntheses into public discourse—especially during the COVID-19 pandemic. CHPR faculty and staff continue to communicate the evidence base produced at the Center with policymakers and other stakeholders through traditional channels, like publications in peer-reviewed journals, but expanding use of social media will heighten the impact of our work.

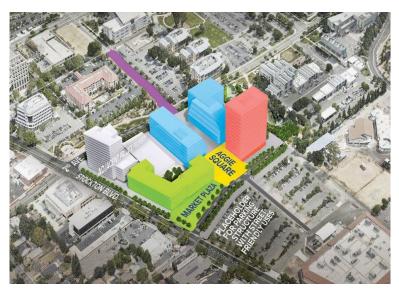


7. Vision



Since its inception in 1994, CHPR (formerly CHSRPC) has adapted to the changing landscape of healthcare, overcome challenges, and grown in membership and scope. CHPR research teams, with expertise in rigorous methods, have made substantial contributions to national healthcare quality metrics, evidence-based clinical guidelines, and state health policies. Understanding of physician-patient communication, pain and pain management, women's healthcare, and effective mental health and substance use programs, to name just a few topics, has deepened due to CHPR-based research. As we move forward into our next chapter, CHPR sits on the brink of essential changes and adaptations that will ensure its continued role as a unique resource at UC Davis, fostering interdisciplinary contributions to improve health and inform evidence-based health policy.

Over the next five years, a new director, selected through a competitive, national search, will



lead CHPR in a post-pandemic time, as we relocate to Aggie Square. This new, upgraded location will enhance CHPR's visibility to the local community, Sacramento policymakers, and students interested in health policy and health equity research. New collaborations will rise naturally from the colocation of research centers with related research missions and skillsets. An expanded core budget will support a strong, cross-trained administrative and grant development team, with sustained funding provided collaboratively by the School of Medicine and the

Office of Research. CHPR mentoring, grants development and pilot project support will build junior researcher experience and funding, so that a cadre of funded researchers are able to compete successfully for extramural center grants to support the work of the Substance Use Research Group on healthcare outcomes, quality, and costs. Known at the state and national levels for outstanding evidence reviews and economic analyses, CHPR research teams will be sought out to conduct policy analyses and evaluations of new and existing research and intervention programs. Federal and state efforts to ensure continuous improvement and re-evaluation of

healthcare quality metrics will support CHPR's nationally recognized Healthcare Quality and Safety research group. The Population Health Group will strengthen ties to the community through its expanded portfolio in evaluation of community-based interventions to improve health. A growing focus on healthy aging will be supported not only by the conventional government and foundation funders, but will be funded by private developers with a commitment to creating evidence-based communities to support healthy aging.

New and expanded programs convened by CHPR at Aggie Square will focus on community engagement and translation of research for policymakers. This will foster the Center's visibility and reputation, and spur solicitation of work by outside agencies and institutions Undergraduate and graduate students will work together with postdoctoral fellows and faculty on project teams to enrich the educational experience at all levels. A solidly funded

"As an ORU, CHPR "plays a key role in facilitating collaborations in health services research and health policy that bridge the main campus and the medical/nursing campus... [and] given the size of UC Davis, with multiple health science schools and a large academic health center, CHPR should be seen as 'mission critical' for the University."

~ Paul Dodd, PhD Associate Vice Chancellor for Interdisciplinary Research and Strategic Initiatives, UC Davis

undergraduate summer research internship program will support undergraduates from UC Davis and other universities to have an engaging experience in health outcomes research or policy analysis. Graduate-level teaching by CHPR faculty will continue, but faculty will also contribute to didactic teaching of undergraduates enrolled in relevant Quarter at Aggie Square programs. An AHRQ- or HRSA-funded T32 postdoctoral research training program will integrate fellows with students to enhance our educational programs on research methods. A commitment to identifying and selecting diverse trainees at all levels will help to ensure diversity of the pipeline for future faculty and staff committed to health outcomes research and health policy analysis. In collaboration with the UC Sacramento Center, CHPR will sponsor a series of topical health policy seminars alternating at Aggie Square and Capitol locations to target audiences of state government leadership and staff as well as faculty and students.

CHPR's expanded, diversified research and evaluation funding portfolio, with support from federal research programs, state government, foundations, industry, and philanthropy, will smooth out variations stemming from temporal changes in one or another funding source. CHPR will continue to fill its essential and unique role in bringing together students and faculty from an array of disciplines to conduct collaborative research to improve healthcare outcomes, quality, access, and costs.

In summary, CHPR plays an essential role as an Organized Research Unit for UC Davis, bridging departments and schools to inspire and support innovative, interdisciplinary research. Our work has had important impacts on healthcare and health policy. Support from the Office of Research and the School of Medicine will ensure that transitions to a new director and new location offer opportunities to increase that impact through enhanced visibility, increased educational impact, and expanded extramural funding.

8. Challenges and Solutions



Chapter Snapshot

CHPR has adapted, grown, and thrived despite many challenges over the years. Some are persistent and expected, others have been unanticipated. Pressing current challenges include the need for expanded core support to ensure adequate administrative staffing and further increases in extramural funding, successful renewal of the postdoctoral training grant to support CHPR's mission to train high impact health services researchers, relocation to new space compliant with UC seismic regulations that will foster continued research collaboration and growth, and successful leadership transition.

Core Administrative Support

CHPR has historically maintained a very lean administrative staffing model. Administrative staff have not only overseen the day to day running of CHPR, they have doubled as the grants development team, supporting CHPR member investigators in assembling and submitting complex proposals in a correct and timely fashion. The CHPR grants development team improves University efficiency by centralizing expertise in the preparation and submission of grants related to health access, outcomes, costs and quality. Individual departments, which have many other primary responsibilities, often struggle to provide these services to faculty, and a spike in demand can make multiple submissions for the same grant deadline impossible. Our flexible, cross-trained team accommodates these demands more readily and enhances total grant and contract revenues. As the Center has grown it has strained the capacity of its administrative staff, and in the final 6 months of the 19-20 academic year, CHPR experienced major challenges with the departure of our financial analyst as well as the extended leave and subsequent resignation of the Center CAO.

With a lean administrative team and limited overlap in administrative roles, finding interim administrative support was critical. Fortunately, we were able to identify part-time interim support, and this was supplemented by CHPR supervisors taking on additional administrative



duties. We were delighted to complete a successful search for a permanent CAO with the acceptance of the position by current interim CAO Michael Webster. The search for a qualified financial analyst continues while we manage with part-time interim support. The past six months have emphasized the need for a more robust administrative staffing model, which will reduce the risks of unexpected staff departures and enable expansion of the grants development process central to CHPR's growth. This will require additional cross training of supervisory and administrative support staff, and augmentation of the CHPR core budget to deepen and expand the administrative staff's capacity for financial management, supervisory oversight, human resources, and grants development.

Visibility

Visibility was identified as a critical area for improvement in our last ORU review (2008-2013). Subsequently, CHPR invested in a communications and marketing position to enhance our website, produce a regular newsletter for members, and develop a marketing plan to further improve visibility at university, regional, state and national levels. We worked with the marketing group in the Office of Research to develop visual branding. We have invested in announcements on our local public radio station and have expanded into social media platforms including Twitter and Facebook. In addition, collaborations with the Behavioral Health Center of Excellence and the Center for Health Technology have expanded the project scope and expertise of all three centers, which recently supported five pilot

Center for Healthcare Policy and Research

grants related to impacts of COVID-19 (see Chapter 1). The Chancellor

highlighted this teamwork in a recent weekly communication, further evidence of our expanding visibility. More work remains to be done, however, particularly to enhance our visibility at a state and national level. Development of a formal strategic marketing plan to accomplish this goal is a key next step for CHPR.

Research Training Programs

CHPR has a strong track record of federally funded postdoctoral research training programs. Our current HRSA-funded T32, QSCERT-PC, will finish in 2021, with a possible extension to 2022. At this time, neither HRSA nor AHRQ, which have supported our previous T32 programs, have published announcements soliciting applications. Individual postdoctoral fellows have obtained funding to support their work with CHPR mentors, but a new training grant would be most consistent with our mission. Future T32 applications must give careful consideration to plans for recruiting diverse applicants, which will require innovative thinking and resource investments.

Expanding undergraduate research training is a current goal of CHPR, and establishing a fund to support paid summer undergraduate internships has been the target of fundraising efforts to date. The diverse undergraduate class at UC Davis provides a long-term opportunity to expand the diversity of health services research trainees.

Leadership Transition

Dr. Melnikow will complete 12 years as CHPR Director in June 2021. The search for the new CHPR Director must be initiated shortly, so that the transition is seamless and CHPR continues to thrive and grow. Dean Brashear and her staff in the School of Medicine, as well as the leadership in the Office of Research are aware of this impending transition and starting to plan the process.

Space

CHPR has occupied leased space in the aging Grange Building on the edge of the Medical school campus for roughly 20 years. During the most recent lease renewal process, a UC-wide mandated seismic inspection identified a number of the building's structural features that do not meet UC seismic standards. Seismic upgrades estimated to cost over \$100,000 would be required for the building to meet these standards so the lease could be renewed. Although the prior lease costs have



been very reasonable, this level of investment in a leased building has met with little enthusiasm from the University or the Grange ownership. CHPR has continued for nearly a year on a monthly rental basis as discussions about relocation are ongoing. In the interim, work-from-home was implemented due to the COVID-19 pandemic. CHPR staff were able to quickly adapt and transition to maintain their productivity while working from home. In the post-pandemic world, we anticipate that many staff will return to work on-site part-time, with a substantially increased rate of telecommuting; hence, the CHPR square footage requirements are expected to decrease by 30-40%.



Aggie Square, an initiative of Chancellor May, will bring a new innovation incubator, community partners, and a unique educational environment to the Sacramento UC Davis Health campus. The focus on advancing human health, building collaboration, and expanding relationships with the surrounding community and nearby State Capital presents an exciting opportunity for CHPR and a solution to our need to relocate. The presence of CHPR in Aggie Square (when completed) will

augment CHPR's visibility and support our mission. CHPR is an excellent fit with the goals of Aggie Square, especially in light of our new research program in Community Engagement and Population Health. The opportunity to co-locate with other research centers such as the CTSC will foster research and research training collaborations. CHPR's presence at Aggie Square will highlight and expand our undergraduate educational programs and our connections to health policy makers and the regional community. Relocation of CHPR to Aggie Square represents an

opportune solution to the seismic challenges of our current space, and adds a unique resource to Aggie Square. Confirmation of specific space, square footage allocation and financial support for relocation remain to be determined.

Summary

In summary, CHPR has continued to face substantial challenges related to sustainability, administrative support, and visibility, though progress has been made on all three fronts. New challenges include the requirement to transition to a new space that meets UC seismic requirements, and a planned leadership transition at the end of the current academic year. The opportunity for CHPR to relocate to Aggie Square to continue growth and innovation under the guidance of a new director offers exciting possibilities. To address CHPR's challenges successfully, the University and School of Medicine will need to invest resources so that CHPR will continue to thrive, grow, conduct collaborative research, inform health policy, and improve health.



9. Justification for Continuance

The COVID-19 pandemic of 2020 has underscored the critical importance of evidence-based health policy more than any other event during the past 100 years. Beyond COVID-19, US healthcare faces enormous challenges. Healthcare quality is inconsistent, inequities are profound, and gaps in patient safety and quality result in preventable injuries and deaths. The costs of healthcare in the US continue to increase, but health outcomes do not match those of other developed countries, many of which spend far less per capita on healthcare. CHPR plays a unique role at UC Davis in supporting the vital effort to generate research and research syntheses to support evidence-based health policy. CHPR provides the infrastructure, skilled staff, and mentoring required to compete successfully for funding to carry out the complex, interdisciplinary work of health services research. It fosters the collaborations among faculty and across other schools and centers in the University essential to support the generation and synthesis of evidence required for guiding safe and effective healthcare and health policy.

CHPR investigators are contributing to finding solutions to the challenges posed by COVID-19, the opioid epidemic, the exponential increase in our aging population, the need for programs to address mental health crises outside our emergency departments, the accelerating costs of US

healthcare, and the ability to measure the quality and safety of care in a meaningful way. Without CHPR, opportunities for interdisciplinary research collaborations in these areas would decline dramatically, and the skilled staff who support this work would disperse.

"If CHPR did not exist in 2020, someone would have to invent it."

~Richard Kravitz, MD, MSPH Director, UC Center Sacramento

The future will demand more scientists skilled in rigorous research methods to address the many current and future health and health services challenges faced by our nation. CHPR trains this next generation of researchers to work in interdisciplinary team settings, and has sent many into successful academic positions. Without CHPR, this pipeline at UC Davis would decline substantially. Undergraduate and graduate students, fellows, and junior faculty would lack a central source of inspiration to follow in the footsteps of their mentors to identify new approaches to improve health outcomes and health policy.

Although CHPR was founded over 25 years ago, its role as an Organized Research Unit is even more important today than it was in 1994. The need for evidence to inform healthcare and health policy has never been more acute. CHPR has grown and adapted to changing healthcare and health policy landscapes throughout its existence. The essential core support for CHPR is minimal relative to the benefits it provides as an incubator for research and research training to support evidence-based health policy.

Appendix 1. Personnel

Appendix 1 Table 1. CHPR-Affiliated Grant-Supported Academic Personnel, 2019-2020

Name	Home Department	Position	% Grant Supported Time
David Barnes, MD	Emergency Medicine	Faculty	1%
Bryn Mumma, MD, MAS	Emergency Medicine	Faculty	3%
Garen Wintemute, MD, MPH	Emergency Medicine	Faculty	4%
Alicia Agnoli, MD, MPH, MHS	Family & Community Medicine	Faculty	8%
Joshua Fenton, MD, MPH	Family & Community Medicine	Faculty	23%
Anthony Jerant, MD	Family & Community Medicine	Faculty	7%
Sky Lee, MD	Family & Community Medicine	Faculty	3%
Elizabeth Magnan, MD, PhD	Family & Community Medicine	Faculty	15%
Sarah Marshall, MD	Family & Community Medicine	Faculty	4%
Joy Melnikow, MD, MPH	Family & Community Medicine	Faculty	35%
Stephen Henry, MD, MSc	Internal Medicine - General Medicine	Faculty	22%
Patrick Romano, MD, MPH	Internal Medicine - General Medicine	Faculty	61%
Eleanor Bimla Schwarz, MD, MS	Internal Medicine - General Medicine	Faculty	66%
Elisa Tong, MD, MA	Internal Medicine - General Medicine	Faculty	65%
Shin-Ping Tu, MD, MPH	Internal Medicine - General Medicine	Faculty	11%
Souvik Sarkar, MD, PhD	Internal Medicine - Gastroenterology	Faculty	1%
Imo Ebong, MBBS, MS	Internal Medicine - Cardiology	Faculty	1%
Sandhya Venugopal, MD, MS-HPEd	Internal Medicine - Cardiology	Faculty	1%
Jose Morfin, MD	Internal Medicine Nephrology	Faculty	1%
Christian Sandrock, MD, MPH	Internal Medicine Pulmonary	Faculty	12%
Jacqueline Stocking, PhD, MBA, MSN	Internal Medicine Pulmonary	Faculty	56%
Sarah Barnhard, MD	Pathology & Lab Medicine	Faculty	1%
Nam Tran, PhD	Pathology & Lab Medicine	Faculty	6%
Michelle Hamline, MD, PhD	Pediatrics	Faculty	1%
Frank Ing, MD, FACC, MSCAI	Pediatrics	Faculty	3%
Sanjay Jhawar, MS, FCCP	Pediatrics	Faculty	1%
James Marcin, MD, MPH	Pediatrics	Faculty	1%
Heather McKnight, MD, FAAP	Pediatrics	Faculty	1%
Alison D McWilliams, DO	Pediatrics	Faculty	1%

Kiran Nandalike, MD	Pediatrics	Faculty	1%
Andrew Pelech, MD	Pediatrics	Faculty	1%
Ulfat Shaikh, MD, MPH	Pediatrics	Faculty	33%
Daniel Tancredi, PhD	Pediatrics	Faculty	23%
Mark Underwood, MD, MAS	Pediatrics	Faculty	1%
Loren Davidson, MD	Physical Medicine & Rehab	Faculty	1%
Debra Kahn, MD	Psychiatry & Behavioral Science	Faculty	1%
Lorin Scher, MD	Psychiatry & Behavioral Science	Faculty	2%
Melanie Dove, MPH, ScD	Public Health Sciences	Faculty	32%
Jeffrey Hoch, PhD	Public Health Sciences	Faculty	5%
Susan Stewart, PhD	Public Health Sciences	Faculty	6%
Catherine Vu, MD	Radiology	Faculty	1%
Garth Utter, MD, MSc	Surgery	Faculty	19%
Deb Bakerjian, PhD	School of Nursing	Faculty	25%
Renata Abrahao, MD, MSc, PhD	Internal Medicine	Postdoc- fellow	100%*
Sarah Kahle, MA, EdM, PhD	Psychiatry & Behavioral Science	Postdoc- fellow	100%*
Ronit Ridberg, PhD, MS	School of Nursing	Postdoc- fellow	100%*
Adrienne Hoyt-Austin, DO	Pediatrics	Postdoc- fellow	100%*
Seonhwa Lee, PhD	Human Ecology	Postdoc- fellow	100%*
Anne White, PhD	School of Nursing	Postdoc- fellow	100%*
Logan Trenamam, PhD	Public Health Sciences	Postdoc- fellow	100%*
Iraklis Tseregounis, PhD	CHPR	Postdoc- fellow	17%
Cindy Valencia, MPH	Public Health Sciences	GSR	41%
Andersen Yang, BA	Public Health Sciences	GSR	18%
Lorri Zipperer, BA	UCD Library	Librarian	29%

Appendix 1 Table 2. Individuals using CHPR Grant submission services, 2014 – 2020 Previous arant awarded through CHPR, 2014 – 2020

		Previous grant awarded through CHPR, 2014 – 2020
#	Name	Department
1	Alicia Agnoli, MD, MPH, MHS	Family & Community Medicine
2	Sergio Aguilar-Gaxiola, MD, PhD	General Medicine
3	Nick Anderson, MS, PhD	Public Health Sciences
4	Alexandra Calderon, BA	Medical student
5	Sarah Combellick, MPH, MA	Sociology
6	Joshua Fenton, MD, MPH	Family & Community Medicine
7	Stephen Henry, MD, MSc	Internal Medicine
8	Rebecca Hluhanich, PharmD	Pharmacy
9	Jeffrey Hoch, PhD	Public Health Sciences
10	Anthony Jerant, MD	Family & Community Medicine
11	Richard Kravitz, MD, MSPH	Internal Medicine
12	Elizabeth Magnan, MD, PhD	Family & Community Medicine
13	Joy Melnikow, MD, MPH	Family & Community Medicine
14	Bryn Mumma, MD, MAS	Emergency Medicine
15	Patrick Romano, MD, MPH, FACP, FAAP	Internal Medicine
16	Eleanor Schwarz, MD, MS	Internal Medicine
17	Jacqueline Stocking, PhD, MBA, MSN	Internal Medicine
18	Elisa Tong, MD, MA	Internal Medicine
19	Ashley Trask, PharmD	Pharmacy
20	Elaine Waetjen, MD	Obstetrics and Gynecology
21	Glen Xiong, MD	Psychiatry and Behavioral Sciences
22	Patricia Zrelak, PhD, RN, CNRH, NEA-BC	School of Nursing
		Previous grant submitted through CHPR 2014 - 2020

Previous grant submitted through CHPR, 2014 - 2020

		, , , , , , , , , , , , , , , , , , , ,
23	Shin-Ping Tu, MD, MPH	Internal Medicine
24	Aaron Bain, BA	Student
25	David Chin, PhD	CHPR post-doctoral fellow
26	Lorien Dalrymple, MD, MPH	Internal Medicine
27	Scott Fishman, MD	Anesthesiology and Pain Medicine
28	Bill Lasley, PhD	Population Health and Reproduction
29	Marcin, James	Pediatrics
29	Helene Margolis, PhD	Internal Medicine
30	Aimee Moulin, MD	Emergency Medicine
31	Deborah Paterniti, PhD	Internal Medicine
32	Ronit Ritberg, PhD	CHPR post-doctoral fellow
33	Naileshni Singh, MD	Anesthesiology and Pain Medicine
34	Efrain Talamantes, MD, MBA, MSHPM	Internal Medicine
35	Daniel Tancredi, PhD	Pediatrics
36	Christop Vogel, PhD	Center for Health and the Environment

Appendix 1 Table 3. CHPR Administrative and Research Staff, 2019-2020

Name	Title	FTE
Christopher Anderson	Writer Editor 3	0.5
Oluseun Atolagbe*	Clinical Documentation Specialist 3	
Desiree Backman	Population Health Specialist 5	1.0
Monica Baker*	Administrative Manager 1	
Bethney Bonilla	Clinical Research Analyst 4	1.0
Mary Bradsberry*	Research Data Analyst 2	
Olivia Call	Marketing Specialist 4	1.0
Camille Cipri	Clinical Research Analyst 4	1.0
Ryan Ciuffetelli	Project Policy Analyst 2	0.5
Althea Crichlow*	Survey Researcher 2	
Shauna Durbin*	Quality Improvement Healthcare Specialist 3	
Margaret Fix	Clinical Research Analyst 4	0.3
Melissa Gosdin	Quality Improvement Healthcare Supervisor 2	1.0
Shannon Haggitt	Project Policy Analyst 3	1.0
Barry Hill	Project Policy Analyst 3	0.5
, Rebecca Hsieh	Marketing Specialist 3	1.0
Dusan Hutak*	Business Technical Support Analyst 2	
Angela (Jackie) Kaslow*	Project Policy Manager 1	1.0
Neal Kohatsu	Research Data Analyst 3	1.0
Carrie Lewis	Research Data Analyst 3	0.5
Sabrina Lourerio	Student Assistant 3	0.4
Belinda Martineau	Writer Editor 3	0.5
Camlyn Mccracken	Project Policy Analyst 2	1.0
, Marykate Miller	Clinical Research Analyst 4	1.0
Eryn Murphy	Data Systems Analyst 3	1.0
Kulsoom (Hiba) Naz	Project Policy Analyst 2	1.0
Andrew Padovani	Research Data Analyst 3	1.0
Ruchi Rawal	Project Policy Analyst 2	0.5
Dominique Ritley	Quality Improvement Healthcare Specialist 3	0.5
Moreen Sharma	Project Policy Analyst 3	1.0
Maria Shrestha*	Research Administrator 3	1.0
Crystie Tiet	Project Policy Analyst 2	1.0
Kirstin Truitt	Administrative Officer 2	1.0
Erik Tseregounis	Post-Doc Employee	1.0
Cynthia Vela	Project Policy Analyst 4	1.0
Elizabeth Vice*	Project Policy Analyst 3	
Marissa Vismara*	Clinical Research Analyst 4	
Michael Webster	Administrative Manager 1	1.0
Gary Weinberg	Survey Researcher 3	1.0
Meghan Weyrich	Quality Improvement Healthcare Supervisor 2	1.0
Guibo Xing	Research Data Analyst 3	1.0
Open Recruitment	Clinical Research Analyst 4	1.0
Open Recruitment	Research Administrator 2	1.0
•		

Open Recruitment	Clinical Documentation Specialist 3	1.0
Open Recruitment	Project Policy Analyst 2	1.0
Open Recruitment	Research Data Analyst 2	1.0
Open Recruitment	Project Policy Manager 1	1.0
Vacant	Quality Improvement Healthcare Specialist 3	1.0
Vacant	Project Policy Analyst 3	0.5
Vacant	Project Policy Analyst 3	0.5
Vacant	Survey Researcher 2	0.5
		36.7
1		

^{*}Separated

Appendix 1 Table 4. 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
Benjamin Houlton, PhD	Professor and Chancellor's Fellow & Director UC Davis John Muir Institute of the Environment
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 1 Table 5. 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

Appendix 2. Postdoctoral Fellows, Graduate Student Trainees and Mentees

Appendix 2 Table 1. CHPR Post-Doctoral Fellows (2014-2020): List of Publications and Products

Fellow Name	Mentor(s)	Project(s)	Publications and Products
Anna Lee Amarnath (DeSista) MD, MPH (2014)	Joshua Fenton, MD, MPH Joy Melnikow, MD, MPH	Use of electronic health record data to evaluate overuse and underuse of screening for osteoporosis	Publications: Fenton JJ, Robbins JA, Amarnath AL, et al. Osteoporosis Overtreatment in a Regional Health Care System. JAMA Intern Med. 2016;176(3):391-3. 10.1001/jamainternmed.2015.6020
			Amarnath AL, Franks P, Robbins JA, et al. Underuse and Overuse of Osteoporosis Screening in a Regional Health System: a Retrospective Cohort Study. J Gen Intern Med. 2015;30(12):1733-40. 10.1007/s11606-015-3349-8
			Conference Paper: Amarnath AL, Osteoporosis screening in primary care: Identifying targets for appropriate utilization. North American Primary Care Research Group Conference (NAPGRG). *Received an award as the best research presented by a resident or fellow.
			Amarnath AL, Screening in a regional health system: Retrospective cohort study. Rapid Review of New Evidence for Family Practice Grand Rounds, February 2014
			Amarnath AL, Prescription opioid misuse and overdose prevention: A summary of evidence for intervention. California Department of Health Care Services Research Seminar, January 2014
Sarah Bateni, MD, MAS (2018)	Robert Canter, MD	Comparing surgical and medical outcomes among stage IV cancer patients with bowel obstruction using a California statewide	<u>Publications</u> : Gingrich AA, Bateni SB , Monjazeb AM, et al. Extremity soft tissue sarcoma in the elderly: Are we overtreating or undertreating this potentially vulnerable patient population? J Surg Oncol. 2019;119(8):1087-98. 10.1002/jso.25470
		hospital database.	Brown EG, Bateni SB , Burgess D, et al. Interhospital Variability in Quality Outcomes of Pancreatic Surgery. J Surg Res. 2019;235:453-8. 10.1016/j.jss.2018.10.035
			Bateni SB, Gingrich AA, Jeon SY, et al. Clinical Outcomes and Costs Following Unplanned Excisions of Soft Tissue Sarcomas in the Elderly. J Surg Res. 2019;239:125-35. 10.1016/j.jss.2019.01.055

Bateni SB, Gingrich AA, Hoch JS, et al. Defining Value for Pancreatic Surgery in Early-Stage Pancreatic Cancer. JAMA Surg. 2019:e193019. 10.1001/jamasurg.2019.3019

Bateni SB, Davidson AJ, Arora M, et al. Is Breast-Conserving Therapy Appropriate for Male Breast Cancer Patients? A National Cancer Database Analysis. Ann Surg Oncol. 2019;26(7):2144-53. 10.1245/s10434-019-07159-4

Bateni SB, Olson JL, Hoch JS, et al. Drivers of Cost for Pancreatic Surgery: It's Not About Hospital Volume. Ann Surg Oncol. 2018;25(13):3804-11. 10.1245/s10434-018-6758-1

Bateni SB, Gingrich AA, Stewart SL, et al. Hospital utilization and disposition among patients with malignant bowel obstruction: a population-based comparison of surgical to medical management. BMC Cancer. 2018;18(1):1166. 10.1186/s12885-018-5108-9

Bateni SB, Meyers FJ, Bold RJ, et al. Increased Rates of Prolonged Length of Stay, Readmissions, and Discharge to Care Facilities among Postoperative Patients with Disseminated Malignancy: Implications for Clinical Practice. PLoS One. 2016;11(10):e0165315. 10.1371/journal.pone.0165315

Bateni SB, Meyers FJ, Bold RJ, Canter RJ. Current perioperative outcomes for patients with disseminated cancer. J Surg Res. 2015 Jul;197(1):118-25.

Bateni SB, Meyers, F.J., Bold, R.J., & Canter, R.J. Comparison of the ASA Physical Status Classification, the Charlson Comorbidity Index, and the Modified Frailty Index to Predict Postoperative Outcomes among Stage IV Cancer Patients with Bowel Obstruction.

Conference Abstract:

Bateni, SB., Bold, R.J, Meyers, F.J, & Canter, R.J. Nomograms Predicting Postoperative Outcomes for Stage IV Cancer Patients with Bowel Obstruction. Society of Surgical Oncology Annual Cancer Symposium. 2017

Conference Paper:

Bateni, S.B., Bold, R.J, Meyers, F.J, & Canter, R.J. The Modified Frailty Index as a Predictor of Mortality among Stage IV Cancer Patients Undergoing Surgery for Bowel Obstruction. 12th Annual Academic Surgical Congress. 2017

Anthony Carden, MD, MPH (2015) Joseph Galante, MD Research evaluated new strategies for training surgical skills.

James Chenoweth, MD, MAS (2016)	James Holmes, MD, MPH Mark Sutter, MD Nathan Kupperman, MD, MPH Daniel Nishijima, MD, MAS	Determining the rate of intracranial hemorrhage in patients on new anticoagulants who have blunt head trauma.	Publications: Chenoweth JA, Gaona SD, Faul M, et al. Incidence of Delayed Intracranial Hemorrhage in Older Patients After Blunt Head Trauma. JAMA Surg. 2018;153(6):570-5. 10.1001/jamasurg.2017.6159 Chenoweth JA, Johnson MA, Shook L, et al. Prevalence of Intracranial Hemorrhage after Blunt Head Trauma in Patients on Pre-injury Dabigatran. West J Emerg Med. 2017;18(5):794-9. 10.5811/westjem.2017.5.33092 Conference Paper: Chenoweth JA. Pediatric bupropion ingestions case report. Eurotox Conference at North American Congress of Clinical Toxicology. September 2015
David Chin, PhD (2015)	Heejung Bang, PhD Patrick Romano, MD, MPH	Improving the quality of care and patient safety in the hospital setting Hospital factors associated with readmission intervals	Publications: Chin DL, Bang H, Manickam RN, et al. Rethinking Thirty-Day Hospital Readmissions: Shorter Intervals Might Be Better Indicators Of Quality Of Care. Health Aff (Millwood). 2016;35(10):1867-75. 10.1377/hlthaff.2016.0205 Chin DL, Bang H, Romano PS. Hospital Readmissions: The Authors Reply. Health Aff (Millwood). 2017;36(2):382. 10.1377/hlthaff.2016.1516 Chin DL, Wilson MH, Bang H, et al. Comparing patient outcomes of academician-preceptors, hospitalist-preceptors, and hospitalists on internal medicine services in an academic medical center. J Gen Intern Med. 2014;29(12):1672-8. 10.1007/s11606-014-2982-y
Jessica Cox (Bowman), MD, MAS, PhD (2019)	Gregory Jurkovich MD, FACS Garth Utter, MD, MSc	Research focuses on how to improve ICU utilization for elderly trauma patients based on fragility scores and ICU outcomes.	Bowman JA, Utter GH. Evolving Strategies to Manage Clostridium difficile Colitis. J Gastrointest Surg. 2020;24(2):484-91. 10.1007/s11605-019-04478-5 Bowman JA, Jurkovich GJ, Nuno M, et al. Hospitallevel Intensive Care Unit Admission for Patients with Isolated Blunt Abdominal Solid Organ Injury. J Trauma Acute Care Surg. 2020. 10.1097/ta.00000000000002581 Bowman JA, Jurkovich GJ, Nishijima DK, et al. Older Adults With Isolated Rib Fractures Do Not Require Routine Intensive Care Unit Admission. J Surg Res. 2020;245:492-9. 10.1016/j.jss.2019.07.098 Spruce MW, Bowman JA, Wilson AJ, et al. Improving Incidental Finding Documentation in Trauma Patients Amidst Poor Access to Follow-up Care. J Surg Res. 2019;248:62-8. 10.1016/j.jss.2019.11.017 Bowman JA, Utter GH. Electronic chest tube drainage devices and low suction following video-assisted thoracoscopic pulmonary lobectomy. J Thorac Dis. 2019;11(5):1738-41. 10.21037/jtd.2019.05.26 Conference Paper:

Cox, **J.**, Jurkovich, G., Utter, G. Admission of geriatric patients with isolated rib fractures to an intensive care unit does not improve outcomes. 42nd Annual Resident Trauma Paper Competition at the Committee on Trauma 97th Annual Meeting, Chicago, IL. March 21, 2019.

Cox, **J.**, Jurkovich, G., Utter, G. Hospital-level tendency to admit patients with isolated blunt solid organ injury to an intensive care unit is not associated with improved outcomes. Pacific Coast Surgical Association Conference, Tucson, AZ. March 2019.

Cox, J., Jurkovich, G., Utter, G. Admission of geriatric patients with isolated rib fractures to an intensive care unit does not improve outcomes. Region IX Committee on Trauma Resident Paper Competition, Palo Alto, CA. December 2018.

Cox, **J.**, Jurkovich, G., Utter, G. Admission of geriatric patients with isolated rib fractures to an intensive care unit does not improve outcomes. Northern California Committee on Trauma Resident Paper Competition, Sacramento, CA. October 2018.

Cox, J., Jurkovich, G., Utter, G. Hospital-level tendency to admit elderly trauma patients with isolated rib fractures to an intensive care unit is not associated with improved outcomes. American Association for the Surgery of Trauma Conference, San Diego, CA. August 2018.

Rosenthal JL, Doiron R, Haynes SC, **Daniels B**, Li ST. The Effectiveness of Standardized Handoff Tool Interventions During Inter- and Intra-facility Care Transitions on Patient-Related Outcomes: A Systematic Review. *Am J Med Qual*. 2018;33(2):193-206. doi:10.1177/1062860617708244

Daniels B, Schoenfeld E, Taylor A, Weisenthal K, Singh D, Moore CL. Predictors of Hospital Admission and Urological Intervention in Adult Emergency Department Patients with Computerized Tomography Confirmed Ureteral Stones. *J Urol.* 2017;198(6):1359-1366. doi:10.1016/j.juro.2017.06.077

Moore CL, **Daniels B**, Gross CP, et al. External Validation of the STONE Score. Ann Emerg Med. 2016;67(2):301-2. 10.1016/j.annemergmed.2015.11.011

Daniels B, Gross CP, Molinaro A, et al. STONE PLUS: Evaluation of Emergency Department Patients With Suspected Renal Colic, Using a Clinical Prediction Tool Combined With Point-of-Care Limited Ultrasonography. Ann Emerg Med. 2016;67(4):439-48. 10.1016/j.annemergmed.2015.10.020

Moore CL, **Daniels B**, Singh D, et al. Ureteral Stones: Implementation of a Reduced-Dose CT Protocol in Patients in the Emergency Department with Moderate to

Brock Daniels, MD, MPH, MAS (2017) Nathan Kupperman, MD, MPH James Holmes, MD, MPH

Patients with renal stones presenting to the Emergency Department

Interventions to promote more timely and effective care in the ED.

High Likelihood of Calculi on the Basis of STONE Score. Radiology. 2016;280(3):743-51. 10.1148/radiol.2016151691

Moore CL, **Daniels B**, Ghita M, et al. Accuracy of reduced-dose computed tomography for ureteral stones in emergency department patients. Ann Emerg Med. 2015;65(2):189-98.e2. 10.1016/j.annemergmed.2014.09.008

Moore CL, Broder J, Gunn ML, et al. Comparative Effectiveness Research: Alternatives to "Traditional" Computed Tomography Use in the Acute Care Setting. Acad Emerg Med. 2015;22(12):1465-73. 10.1111/acem.12831

Conference Abstract:

Daniels, B. External Validation of the STONE Score. 2017 NRSA Conference, New Orleans, June 2017.

Publications

Jaime MCD, McCauley HL, Tancredi DJ, et al. Implementing a Coach-Delivered Dating Violence Prevention Program with High School Athletes. Prev Sci. 2018;19(8):1113-22. 10.1007/s11121-018-0909-2

Yonas MA, **Jaime MC**, Barone J, et al. Community Partnered Research Ethics Training in Practice: A Collaborative Approach to Certification. J Empir Res Hum Res Ethics. 2016;11(2):97-105. 10.1177/1556264616650802

Jaime MC, Stocking M, Freire K, et al. Using a domestic and sexual violence prevention advocate to implement a dating violence prevention program with athletes. Health Educ Res. 2016;31(6):679-96. 10.1093/her/cyw045

Conference Paper:

Jaime, C. - Exploring the social and cultural influences on young men's perceptions of masculinity, gender attitudes, and sexual risk behaviors. American Public Health Association Annual Meeting, San Diego, CA, November 12, 2018

Jaime, C. Exploring the social and cultural influences on young men's perceptions of masculinity, gender attitudes, and sexual risk behaviors. 24th Annual NRSA Research Trainee Conference, Seattle, WA, June 23, 2018

Jaime, C. Exploring the social and cultural influences on young men's perceptions of masculinity, gender attitudes, and sexual risk behaviors. UC Davis Postdoctoral Research Symposium, Davis, CA, April 23, 2018

Jaime, C. Community engaged research using a qualitative approach. Clinical Epidemiology and Study

Maria Catrina Diestro Jaime, PhD (2019) Eleanor Bimla Schwarz, MD Daniel Tancredi, PhD Study of male juvenile justice youth in Northern CA detention centers to better elucidate the pregnancy intentions and fertility behaviors of this population.

			Design Seminar, UC Davis School of Medicine Residents and Fellows, Fall 2018
			Jaime, C. Community engaged research using a qualitative approach. Clinical Epidemiology Seminar, UC Davis Department of Public Health Sciences Graduate Students, Winter 2018
			Jaime, C. From Research and evaluation to best practices in evaluation. Seminar in Public Health UC Davis School of Medicine, Department of Public Health Sciences, Winter 2018
			Jaime, C. Careers in Community Health. UC Davis Filipino Association Conference Winter 2018
Tejveer Dhillon, MD, MAS (2015)	Garth Utter, MD	Chest wall injury characteristics and outcome prediction	Dhillon TS, Galante JM, Salcedo ES, Utter GH. Characteristics of chest wall injuries that predict postrecovery pulmonary symptoms: A secondary analysis of data from a randomized trial.
(2010)			J Trauma Acute Care Surg. 2015 Aug;79(2):179-86;
Robert Doiron, MD, MAS (2017)	Edgardo Salcedo, MD Joseph M Galante, MD	Surgical education with a specific focus on durability of simulator based surgical training for rare but important procedures.	Publications: Rosenthal JL, Doiron R , Haynes SC, et al. The Effectiveness of Standardized Handoff Tool Interventions During Inter- and Intra-facility Care Transitions on Patient-Related Outcomes: A Systematic Review. Am J Med Qual. 2018;33(2):193-206. 10.1177/1062860617708244
			Conference Abstracts: Simulation Education Series, UC Davis, January 2017
			Medical Student Surgery Clerkship Series, UC Davis, January 2017
			NRSA/AHRQ, Conference Boston, June 2016
			NRSA/AHRQ Conference, New Orleans, June 2017.
			ACS Simulation Meeting, Chicago, March 2017
			MCRTP Annual Symposium, Sacramento, May 2016
Ethana Evana	Themas	Access to maintain and	Surgery Research Symposium, Sacramento, April 2017
Ethan Evans, PhD (2018)	Thomas Beemish, PhD Joy Melnikow, MD, MPH	Access to primary care for Medicaid patients in Northern California Covered California and potential policy impacts of ACA repeal	Publications: Evans EJ, Thompson M. Questions and Answers from Research Centers on Gun Violence. Health Soc Work. 2019;44(4):221-3. 10.1093/hsw/hlz030
			Evans EJ. The No-Wrong-Door Approach: Antidote to Boundaries within the American Welfare State. Health Soc Work. 2019;44(1):8-12. 10.1093/hsw/hly042
			Evans EJ . Health Policy in 2019: Hot Topics and a Call for Social Workers to Pursue Elected Office. Health Soc Work. 2019;44(2):72-4. 10.1093/hsw/hlz009
			Evans EJ. Toward a Socially Oriented Model of Health: Institutionalize Help for Patients to Overcome

Particular Social Difficulties. *Health* Soc Work. 2019;44(3):145-148. doi:10.1093/hsw/hlz019

Moulin A, **Evans EJ**, Xing G, et al. Substance Use, Homelessness, Mental Illness and Medicaid Coverage: A Set-up for High Emergency Department Utilization. West J Emerg Med. 2018;19(6):902-6. 10.5811/westjem.2018.9.38954

Evans EJ. Blended Roles under Health Reform: Where Does Social Work Fit? Health Soc Work. 2018;43(3):141-4. 10.1093/hsw/hly016

Evans EJ. Happy Birthday, National Health Line: A Long History and Solid Foundation for the Future. Health Soc Work. 2018;43(3):145-6. 10.1093/hsw/hly017

Evans EJ. Get Out the Vote: Social Work and the Midterm Elections. Health Soc Work. 2018;43(4):213-6. 10.1093/hsw/hly029

Conference Abstracts:

Evans EJ. What lessons will remain once obamacare is repealed? experience from implementation in California. AcademyHealth, National Health Policy Conference in Washington, D.C. January 31, 2017.

Evans EJ. The challenge of choice in the individual market: learning from CA's enrollment assistance infrastructure. NRSA/AHRQ Conference, New Orleans June 24, 2017.

Evans EJ. What lessons remain when Obamacare is repealed? Institutional intermixing and coverage expansion under healthcare. AcademyHealth ARM. New Orleans June 25-17, 2017

Evans EJ. What lessons will remain when Obamacare is repealed? Critical Dialogue: The Future of Healthcare. The Society for the Study of Social Problems (SSSP) Annual Conference, Montreal Canada. August 12, 2017.

Evans EJ. The Affordable Care Act: Institutional intermixing and trump's promise that competition will be beautiful. Medical Sociology Roundtable. American Sociological Association Annual Conference in Montreal, Canada. August 12, 2017.

Yichen Lin, PhD (2016) Michael DeGregorio, PharmD Evaluation of a potential treatment treatment options for the alleviation of vulvar and vaginal atrophy (VVA) symptoms in breast cancer survivors.

Publications:

Kao CJ, Wurz GT, **Lin YC**, et al. Repurposing ospemifene for potentiating an antigen-specific immune response. Menopause. 2017;24(4):437-51. 10.1097/gme.00000000000000776

Conference Abstract:

A potential treatment treatment options for the alleviation of vulvar and vaginal atrophy (VVA)

Aimee Moulin, MD, MAS (2018) Joy Melnikow, MD, MPH James Holmes, MD, MPH Utilization of Emergency Departments for patients with acute mental health crisis

Analysis of state data for all emergency department visits with patients with serious mental health diagnosis

Identify California county programs and policies that contribute to effective systems of care for patients with serious mental illness. symptoms in breast cancer survivors NRSA/AHRQ, Boston, June 2016 <u>Publications:</u>

Richards JR, Bing ML, **Moulin AK**, et al. Cannabis use and acute coronary syndrome. Clin Toxicol (Phila). 2019;57(10):831-41. 10.1080/15563650.2019.1601735

Moulin A, Lopez-Gusman E. How a Bill Becomes a Law, or How a Truly Terrible Bill Becomes Less Awful. West J Emerg Med. 2019;20(4):549-51. 10.5811/westjem.2019.5.43666

Moulin A, Evans EJ, Xing G, et al. Substance Use, Homelessness, Mental Illness and Medicaid Coverage: A Set-up for High Emergency Department Utilization. West J Emerg Med. 2018;19(6):902-6. 10.5811/westjem.2018.9.38954

Richards JR, Smith NE, **Moulin AK**. Unintentional Cannabis Ingestion in Children: A Systematic Review. J Pediatr. 2017;190:142-52. 10.1016/j.jpeds.2017.07.005

Conference Paper: Presentations

Moulin AK. County variation in mental health emergency department and hospital use in California. Annual NRSA/AHRQ Research Training Conference June 24, 2017.

Moulin AK. Policy implications of alternate destinations and expanded paramedic scope of practice: California Legislative Noon Brief. March 24, 2017.

Moulin AK. ED mental health navigators' best practices for care coordination. California Mental Health Service Act Office of Accountability Conference, July 6, 2017.

Moulin AK. Quick and dirty suicide assessment in the ED. UC Davis Emergency Medicine Academic Forum, August 15, 2016.

Moulin AK. 5150: Hospital jail what it means and what it doesn't. UCD Emergency Medicine Academic Forum, January 2017.

Moulin AK. Community paramedicine pilots in California. Western AHA meeting, November 2016, Irvine CA.

Moulin AK. Malingering in the emergency department from diagnosis to disposition. National Updates in Behavioral Emergencies Conference Las Vegas NV, 2016.

Conference Abstract:

			County Variation in Mental Health Emergency Department and Hospitalization Use in California NRSA/AHRQ Conference, New Orleans, June 2017.	
Susan Perez, PhD (2016)	Patrick Romano, MD, MPH	Consumer comprehension required to understand health information and comparative healthcare quality information on the Internet.	Publications Perez SL. Gosdin M, Pintor JK, et al. Consumers' Perceptions And Choices Related To Three Value-Based Insurance Design Approaches. Health Aff (Millwood). 2019;38(3):456-63. 10.1377/hlthaff.2018.05048 Perez SL. Kravitz RL, Bell RA, et al. Characterizing	
			internet health information seeking strategies by socioeconomic status: a mixed methods approach. BMC Med Inform Decis Mak. 2016;16:107. 10.1186/s12911-016-0344-x	
			Perez S, Chan MS, Paterniti DA. Characterizing internet health information seeking strategies by socioeconomic status: a mixed methods approach. BMC Med Inform Decis Mak. 2016 Aug 9;16:107	
			Perez SL. Paterniti DA, Wilson M, et al. Characterizing the Processes for Navigating Internet Health Information Using Real-Time Observations: A Mixed-Methods Approach. J Med Internet Res. 2015;17(7):e173. 10.2196/jmir.3945	
			Conference Abstract: Perez SL. Characterizing the processes for navigating internet health information using real time observations: A mixed methods approach. Maui, HI 2015	
			Perez SL. Characterizing internet health information seeking strategies by socioeconomic status: a mixed methods approach. NRSA/AHRQ Conference, Boston, June 2016	
Jessie Pintor (Kemmick), PhD, MPH (2017)	Marc Schenker, PhD	Immigration and healthcare policy, disparities in access to and quality of care for children and families, and the effectiveness of health and	Publications Ortega AN, Pintor JK, Alberto CK, et al. Inequities in Insurance Coverage and Well-Child Visits Improve, but Insurance Gains for White and Black Youth Reverse. Acad Pediatr. 2020;20(1):14-5. 10.1016/j.acap.2019.08.005	
	healthcare interventions for vulnerable populations.	healthcare interventions for	Kemmick Pintor J, Alcalá HE, Roby DH, et al. Disparities in Pediatric Provider Availability by Insurance Type After the ACA in California. Acad Pediatr. 2019;19(3):325-332. doi:10.1016/j.acap.2018.09.003	
		Alberto CK, Kemmick Pintor J , McKenna RM, Roby DH, Ortega AN. Racial and Ethnic Disparities in Provider-Related Barriers to Health Care for Children in California After the ACA. <i>Glob Pediatr Health</i> . 2019;6:2333794X19828356. Published 2019 Feb 10. doi:10.1177/2333794X19828356		
			Kemmick Pintor J , Chen J, Alcalá HE, et al. Insurance Coverage and Utilization Improve for Latino Youth but Disparities by Heritage Group Persist Following the	

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Kemmick Pintor J, Mitchell DC, Schenker MB. Exploring the Role of Depression as a Moderator of a Workplace Obesity Intervention for Latino Immigrant Farmworkers. *J Immigr Minor Health*. 2019;21(2):383-392. doi:10.1007/s10903-018-0743-4

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Alberto CK, **Pintor JK**, Martinez-Donate AP, et al. Health Care Access and Utilization for Latino Youth in the United States: The Roles of Maternal Citizenship and Distress. Med Care. 2020. 10.1097/mlr.0000000000001306

Park S, Stimpson JP, **Pintor JK**, et al. The Effects of the Affordable Care Act on Health Care Access and Utilization Among Asian American Subgroups. Med Care. 2019;57(11):861-8. 10.1097/mlr.0000000000001202

Stimpson JP, **Kemmick Pintor J**, McKenna RM, Park S, Wilson FA. Association of Medicaid Expansion With Health Insurance Coverage Among Persons With a Disability. *JAMA Netw Open*. 2019;2(7):e197136. Published 2019 Jul 3. doi:10.1001/jamanetworkopen.2019.7136

Park S, Roby DH, **Pintor JK**, et al. Insurance Coverage and Health Care Utilization Among Asian Youth Before and After the Affordable Care Act. Acad Pediatr. 2019. 10.1016/j.acap.2019.11.004

McKenna RM, **Pintor JK**, Ali MM. Insurance-Based Disparities In Access, Utilization, And Financial Strain For Adults With Psychological Distress. Health Aff (Millwood). 2019;38(5):826-34. 10.1377/hlthaff.2018.05237

Barry CL, Bandara S, Arnold KT, et al. Assessing the Content of Television Health Insurance Advertising during Three Open Enrollment Periods of the ACA. J Health Polit Policy Law. 2018;43(6):961-89. 10.1215/03616878-7104392

Conference Abstract:

Pintor JK. Citizen children in undocumented immigrant families: State-level estimates of uninsurance. 11th Annual Summer Institute on Migration & Global Health, Research Workshop, June 17, 2016, Berkeley, CA.

Pintor JK. Citizen children in undocumented immigrant families: State-level estimates of uninsurance by parental documentation status. AcademyHealth Annual Research Meeting, June 28, 2016, Boston, MA.

Pintor JK. Citizen children in undocumented immigrant families: State-level estimates of uninsurance by parental documentation status. AcademyHealth Child Health Services Interest Group Meeting, June 25, 2016, Boston, MA.

Pintor JK. Citizen children in undocumented immigrant families overrepresented among the uninsured. American Public Health Association Annual Meeting, Denver, CO November 2, 2016

Pintor JK. Organized panel on novel data sources & methods for examining state-level disparities in health insurance, cost, and access to care" and presented on citizen children in undocumented immigrant families: State-level estimates of uninsurance. Association for public policy analysis & management, November 4, 2016, Washington, DC.

Publications

Stulberg DB, Datta A, **White VanGompel** E, et al. One Key Question(R) and the Desire to Avoid Pregnancy Scale: A comparison of two approaches to asking about pregnancy preferences. Contraception. 2020. 10.1016/j.contraception.2019.12.010

White VanGompel E, Perez S, Wang C, et al. Measuring labor and delivery unit culture and clinicians' attitudes toward birth: Revision and validation of the Labor Culture Survey. Birth. 2019;46(2):300-10. 10.1111/birt.12406

White VanGompel E, Perez S, Datta A, et al. Cesarean overuse and the culture of care. Health Serv Res. 2019;54(2):417-24. 10.1111/1475-6773.13123

White VanGompel E, Main EK, Tancredi D, et al. Do provider birth attitudes influence cesarean delivery rate: a cross-sectional study. BMC Pregnancy Childbirth. 2018;18(1):184. 10.1186/s12884-018-1756-7

Conference Abstract:

White VanGompel E. Overuse and underuse of repeat bone densitometry use in a regional health system. Annual Meeting of North American Primary Care Research Group, Cancun, 2016.

White VanGompel E. Do provider birth attitudes influence cesarean delivery rate: a cross-sectional study NRSA/AHRQ, Boston, June 2016.

Emily White VanGompel, MD, MPH (2016) Suzanne Eidson-Ton, MD Joy Melnikow MD, MPH

Association of low risk Cesarean section rates with provider health beliefs and attitudes about birth that may affect intrapartum decision-making. Ann White, PhD (Planned: 2020) Richard Kravitz, MD, MPH Stephen Henry, MD

Interactional strategies doctors use to attempt to detect addiction and the techniques patients use to present themselves as not seeking unnecessary narcotics.

Publications

White AEC. When and how do surgeons initiate noticings of additional concerns? Soc Sci Med. 2020;244:112320. 10.1016/j.socscimed.2019.05.025

Henry SG, Gosdin MM, White AEC, et al. "It Sometimes Doesn't Even Work": Patient Opioid Assessments as Clues to Therapeutic Flexibility in Primary Care. J Gen Intern Med. 2019. 10.1007/s11606-019-05421-9

White AEC. Patient-initiated additional concerns in general surgery visits. Patient Educ Couns. 2018;101(12):2219-25. 10.1016/j.pec.2018.08.012

Conference Paper:

White, AEC. Agenda setting and visit organization in chronic pain primary care visits. Ambulatory Care Center (ACC) Seminar Series California Medical Facility Vacaville, CA. November 13, 2019

White, AEC. Practical communication skills for discussing opioids and chronic pain" Pre-conference workshop Oregon Health and Science University, 2018

White, AEC. Greater than the sum of its parts: Leveraging interdisciplinary teams for analysis of video-recorded clinical encounters. UC Davis 2018

White, AEC. Repairing patient misconceptions in primary care visits. UC Davis, 2018

White, AEC. Agenda Setting in Chronic Pain Primary Care Visits. UC Davis 2018

Conference Abstract:

White, AEC. 17th International Conference on Communication in Healthcare (ICCH) & Health Literacy Annual Research Conference (HARC) San Diego, CA October 28-30, 2019.

White, AEC . The negotiation of opioid prescribing in primary care visits. UC Davis 2019

Lindsey Woodworth, PhD (2016) Cameron Carter, PhD James Holmes, MD, MPH Crowding, predictors of wait times in emergency departments and association with outcomes.

Publications:

Woodworth L. Swamped: Emergency Department Crowding and Patient Mortality. J Health Econ. 2019;70:102279. 10.1016/j.jhealeco.2019.102279

Woodworth L, Romano PS, Holmes JF. Does Insurance Status Influence a Patient's Hospital Charge? Appl Health Econ Health Policy. 2017;15(3):353-62. 10.1007/s40258-017-0308-z

Woodworth L. Smart as a Whip and Fit as a Fiddle: The Effect of a Diploma on Health. American Journal of Health Economics. 2016;2(3):344-72. 10.1162/AJHE_a_00048

Woodworth L. A Leak in the Lifeboat: The effect of Medicaid managed care on the vitality of safety-net hospitals. J Regul Econ. 2016;50(3):251-70. 10.1007/s11149-016-9312-8

<u>Conference Abstract:</u>
AHRQ/NRSA Conference, Boston, June 2016

Appendix 2 Table 2. Selected CHPR Core Faculty Members and Mentees, 2014-2020

Mentor Name	Mentee Name	Years	Role/Subject	Mentee Current Position
Heejung Bang, PhD	David Chin, PhD	2013-2018	dissertation committee and post-doc mentor through QSCERT T32 program	Assistant Professor of Health Policy and Management, Health Promotion and Policy at the University of Massachusetts, Amherst
Heejung Bang, PhD	Eduard Poltavskiy, PhD,	2014	-MS exam chair, dissertation committee and co-mentor of AHRQ Grant 1R36HS024657	UC Davis Department of Biostatistics
Heejung Bang, PhD	Sujuan Cai, RNP, PhD, CWCN	2015	Nursing school at UC-Davis —dissertation committee	Nurse Practitioner and Researcher, VA Palo Alto Health Care System
Heejung Bang, PhD	Lisa J. Jing Mu, PhD,	2016	Epidemiology at UC-Davis –major professor	Medical Health Officer, Fraser Healthy Authority, University of British Columbia- Vancouver
Heejung Bang, PhD	Jiahui Guan	2018	Biostatistics at UC-Davis – dissertation committee	PhD candidate
Heejung Bang, PhD	Brittany Garcia, PhD	2018	Epidemiology at UC-Davis —dissertation committee	Research Associate, EMT Associates, Inc. Davis, CA
Heejung Bang, PhD	Mengxin Wang	2019	Department of Biostatistics –MS exam chair	PhD candidate (Biostatistics) UC Berkeley
Heejung Bang, PhD	Yu Liu	2020	Department of Biostatistics—dissertation committee	PhD candidate (Biostatistics) UC Davis
Diana Cassady, DrPH	Janine Johal, MPH	2015	Diabetes prevention	Emergency Medicine Physician Assistant at Vituity Clinic, Sacramento, CA
Diana Cassady, DrPH	Angela de Leon, PhD	2015	Nutrition: behavior change to adopt a whole fiber diet	Post-doctoral Researcher, USDA Grand Forks Human Nutrition Research Center, North Dakota
Diana Cassady, DrPH	Danielle Lippert, MPH	2017	Tobacco prevention at the local level	Evaluation Associate, UC Davis Tobacco Control Evaluation Center
Diana Cassady, DrPH	Connie Tan, MPH		Nutrition policy: school wellness policies	Program Coordinator, Staff and Faculty Health and Well- being, UC Davis

Joshua Fenton, MD, MPH	Dr. Anna Lee Amarnath	2013-2014	Osteoporosis screening cumulative incidence in a regional health system (published in JGIM)	Medical Program Consultant and Section Chief, Medi-Cal Managed Care Program at the California State Department of Health Care Services
Joshua Fenton, MD, MPH	White- VanGompel, Emily	2014-2016	Repeat osteoporosis screening in a regional health system (published in JGIM)	Assistant Professor of Family Medicine, University of Chicago
Joshua Fenton, MD, MPH	May, Larissa	2015-2016	Watchful waiting as a strategy to reduce low- value diagnostic testing (published in JBFM)	Associate Professor, Emergency Medicine, UC Davis
Joshua Fenton, MD, MPH	Karen de Sola- Smith	2017- current	Congruent patient- physician communication in advanced cancer care	Pre-doctoral candidate, School of Nursing, UC Davis
Erik Fernandez y Garcia, MD	Victoria Keeton, RN,MS, PNP	2019- current	BIMSON PhD qualifying committee): Maternal stress, maternal hardship, and child emotional and medical outcomes	PhD candidate
Erik Fernandez y Garcia, MD	Jessica Huang, MD	2018 - current	Family literacy promotion via pediatric practices (focus on non-english adaptations) Scholarly Project	PL-3 UC Davis Pediatric Trainee
Erik Fernandez y Garcia, MD	Ivan Marquez	2019- current	Individual Learning Plan Advisor (3 year commitment) general pediatrics, incorporating anti-discrimination training into pediatric literacy promotion	PL-3 UC Davis Pediatric Trainee
Erik Fernandez y Garcia, MD	Christina O'Neal, MD MPH	2018- current	Individual Learning Plan Advisor (3 year commitment)-Scholarly Project Advisor (3 year commitment) general	PL-2UC Davis Pediatric Trainee
Stephen Henry, MD, MS	Meng Chen, PhD	2012-2014	pediatrics Developed patient-clinician coding system to analyze patient-clinician communication about pain and test associations between communication behaviors and outcomes	Assistant Professor Department of Media Communications, Webster University, Vienna, Austria

Stephen Henry, MD, MS	Peter Torres	2016- current	Conducted secondary analysis of video data collected, analyzing the role of tone of voice and pitch during patient requests for opioids. Mentor support in collecting clinical data for his dissertation	PhD Candidate Department of Linguistics
Stephen Henry, MD, MS	Wyatt Graham	2019	Trained to code patient- clinician communication for pilot testing a clinician communication training intervention to improve outcomes about opioids and chronic pain management in primary care	UC Davis medical Student
Stephen Henry, MD, MS	Christopher Bautista, MD	2012-2014	examined predictors of opioid dose escalation	Chief Medical Resident asst clinical professor of medicine at UCSF (primary care)
Stephen Henry, MD, MS	Anne E. C. White, PhD	2017- current	"best practices" communication for talking about chronic pain and opioids in primary care	Post-doc in QSCERT-PC
Stephen Henry, MD, MS	I. Erik Tseregounis, PhD	2018- current	risk-prediction analysis and model development for opioid-related harms	Post-doc fellow
Jeffrey Hoch, PhD	Logan Trenaman, PhD	2018 – current	Health economics	Post-doc fellow, UC Davis
Jeffrey Hoch, PhD	Yi Zhang, PhD	2018 – current	Health economics	Post-doc fellow, UC Davis
Jeffrey Hoch, PhD	Kimberly Prado	2020	Qualifying Exam committee,	PhD student, UC Davis
Jeffrey Hoch, PhD	Shannon Hearney	2020	PhD Supervisor	PhD student, UC Davis
Jeffrey Hoch, PhD	Lynne LoPresto	2019	PhD Supervisor	PhD student, UC Davis
Jeffrey Hoch, PhD	Sonia Singh, MD	2019	PhD co-Supervisor	PhD Student, UC Davis
Jeffrey Hoch, PhD	Natalie McCormick, PhD	2018	PhD Examiner, University of British Columbia, Canada	CIHR Post-Doctoral Research Fellow at Massachusetts General Hospital/Harvard Medical School

Jeffrey Hoch, PhD	Parul Dayal, PhD	2017	Chair of Qualifying Exam committee, UC Davis	Data Scientist, Genentech, South San Francisco, CA
Jeffrey Hoch, PhD	Sarah Haynes, PhD	2017	Chair of Qualifying Exam committee, UC Davis	Post-doc fellow, UC Davis
Jeffrey Hoch, PhD	Olutola Peter Akande	2020/2021	Supervisor	MPH Student, UC Davis
Jeffrey Hoch, PhD	Jason Singson, MPH	2019/2020	MPH Supervisor, UC Davis	MPH Student, UC Davis
Jeffrey Hoch, PhD	Angelina Padilla, MPH	2018/2019	MPH Supervisor, UC Davis	MPH Student, UC Davis
Jeffrey Hoch, PhD	Elise Evers, MPH	2018	MSc Supervisor, UC Davis	Health Economist at Source Health Economics
Jeffrey Hoch, PhD	Joslyn Ramirez, MPH	2020	Mentor	MPH Graduate
Jeffrey Hoch, PhD	Melanie Dove, PhD, ScD	2019 – current	Mentor	Adjunct Assistant Professor, Department of Public Health Science, UC Davis
Jeffrey Hoch, PhD	Julie Dang, PhD, MPH	2019 – current	Mentor	Adjunct Assistant Professor, Department of Public Health Science, UC Davis
Jeffrey Hoch, PhD	Michelle Ko, MD, PhD	2017 – current	Mentor	Assistant Professor, Department of Public Health Science, UC Davis
James Holmes, MD	Bryn Mumma, MD	2014-2015	Post-doctoral training	Associate Professor, UC Davis Department of Emergency Medicine
James Holmes, MD	James Chenoweth, MD	2014-2016	Post-doctoral training	UC Davis Department of Emergency Medicine
James Holmes, MD	M Austin Johnson, MD, PhD	2015-2016	Post-doctoral training	Assistant Professor, UC Davis Department of Emergency Medicine
James Holmes, MD	Brock Daniels, MD, MPH, MAS	2016-2017	Post-doctoral training	Assistant Professor, Department of Emergency Medicine at New York Presbyterian Hospital and the Weil Cornell School of Medicine
James Holmes, MD	Lindsey Woodworth, PhD	2014-2016	Post-doctoral training	Assistant Professor, Department of Economics Darla Moore School of Business University of South Carolina

James Holmes, MD	Sanjay Singh, PhD	2019- present	Post-doctoral training	Assistant professor, UC Davis Department of Economics
James Holmes, MD	Aaron Kornblith, MD	2019- present	Post-doctoral training	Associate Professor, Emergency Medicine, UCSF
Anthony Jerant, MD	Michelle Hamline, MD, PhD	2019- current	formal mentor role on Dr. Hamline's UCD Clinical and Translational Science Center KL2 award.	Junior research faculty, UC Davis Department of Pediatrics
Anthony Jerant, MD	Alicia Agnoli, MD, MPH	2018- current	formal mentor role on Dr. Agnoli's Building Interdisciplinary Research Careers in Women's Health award	Junior research faculty, UC Davis Department of Family & Community Medicine
Anthony Jerant, MD	Efrain Talamantes, MD, MBA, MS	2017- current	Post-doctoral training	Junior research faculty, UC Davis Department of General Medicine
Anthony Jerant, MD	Cecilia Jojola, MD	2017- current	Post-doctoral training	Resident, UC Davis Department of Family & Community Medicine
Anthony Jerant, MD	Tara Niendam, PhD	2017- current	Post-doctoral training	junior research faculty, UC Davis Department of Psychiatry
Anthony Jerant, MD	Laura Tully, PhD		Post-doctoral training	junior research faculty, UC Davis Department of Psychiatry
Anthony Jerant, MD	Stephen Henry, MD	2015- current	Opioid overdose research and patient-physician communication	Mid-career research faculty, UC Davis Department of General Medicine
Anthony Jerant, MD	Melissa Lichte, MD, MPH	2014-2016	Post-doctoral training	Resident, UC Davis Department of Family & Community Medicine
Anthony Jerant, MD	Brent Hanson, MD	2014-2016	Post-doctoral training	Resident, UC Davis Department of Family & Community Medicine
Anthony Jerant, MD	Elizabeth Magnan, MD, PhD	2014- current	formal mentor role on Dr. Magnan's UCD Clinical and Translational Science Center (CTSC) KL2 award	Junior research faculty, UC Davis Department of Family & Community Medicine
Richard Kravitz, MD, MSPH	Jeremy Demartini	2017	Patients' Hopes for Advanced Cancer Treatment	Assistant Clinical Professor, UC Davis

Richard Kravitz, MD, MSPH	David Odineal	2017-19	Trial Participation on Analgesic Prescribing for Chronic Pain: Randomized Controlled Trial	Internal Medicine Resident, Madigan Army Medical Center
Richard Kravitz, MD, MSPH	Allison Yu, MS	2019		Medical Student (MS) I UC Davis
Richard Kravitz, MD, MSPH	Kirti Malhorta	2017	Senior research project advisor	Physician researcher, Department of Internal Medicine, UC Davis
Richard Kravitz, MD, MSPH	Karen Marie de Sola-Smith, PhD	2018	Dissertation Committee: UCD Graduate Group in Nursing and Leadership)	Master Entry Program in Nursing, UCSF
Joy Melnikow, MD, MPH	Kris Srinivasan, MD	2012-2014	Faculty Development fellowship: Community Health Center Leadership	Assistant Professor, Department of Family and Community Medicine, UC Davis
Joy Melnikow, MD, MPH	Anna Lee Amarnath, MD, MPH	2013-14	Underuse and Overuse of Osteoporosis Screening in a Regional Health System	Medical Program Consultant and Section Chief, Medi-Cal Managed Care Program at the California State Department of Health Care Services
Joy Melnikow, MD, MPH	Emily White- Van Gompel, MD, MPH	2014-2016	Association of provider beliefs and attitudes with variation in low risk Cesarean section rates	Assistant Professor of Family Medicine, University of Chicago
Joy Melnikow, MD, MPH	Humphries, Misty, MD	2014-2019	Amputation trends for patients with lower extremity ulcers due to diabetes and peripheral artery disease in California	Assistant Professor, Department of Surgery, UC Davis
Joy Melnikow, MD, MPH	Elizabeth David, MD	2015-2018	A Model to Predict the Use of Surgical Resection for Advanced-Stage Non- Small Cell Lung Cancer Patients	Assistant Professor, Department of Surgery, UC Davis
Joy Melnikow, MD, MPH	Ethan Evans, PhD	2016-2018	System factors influencing access to care in Medi-Cal managed care and Covered California	Post-doctoral fellow, AHRQ funded T32

Joy Melnikow, MD, MPH	Aimee Moulin, MD	2016-2018	Emergency room utilization for serious mental health disorders	Post-doctoral fellow, AHRQ funded T32
Joy Melnikow, MD, MPH	Jacob Buckley	2017-2019	Harms of e-cigarettes	Medical Student, UC Davis
Joy Melnikow, MD, MPH	Mary Claire Manske	2018-2019	Risk factors for Brachial pPexus Birth Injury	Pediatric Orthopedic Surgeon Shriners Hospital, UC Davis MCRTP trainee, MAS candidate
Joy Melnikow, MD, MPH	Lauren Jansen, MD	2017-2019	Supervised/guided work on systematic review of community-based interventions to improve healthy aging	Preventive Medicine Resident, University of Massachusetts
Diana Miglioretti, PhD	Christoph Lee, MD	2015-2019	UW, ACS Mentored Research Scholar, Career Development Award	Physician researcher, Departments of Radiology and Health services University of Washington, Seattle, WA; Hutchinson Institute for Cancer Outcomes Research, Public Health Sciences Division, Fred Hutchinson Cancer Research Center, Seattle, WA
Diana Miglioretti, PhD	Dejana Braithwaite, PhD	2011-2015	UCSF, ACS Mentored Research Scholar, Career Development Award	Associate Professor, Oncology Academic Department, Georgetown University School of Medicine
Diana Miglioretti, PhD	Yifei Wang	2014-2017	Committee Chair	PhD Candidate in Biostatistics
Diana Miglioretti, PhD	Michael Bissell	2015- current	Committee Chair	PhD Candidate in Epidemiology
Diana Miglioretti, PhD	Emily Marlow (UCD Epidemiology)	2015- current	Committee Chair	PhD Candidate in Epidemiology
Diana Miglioretti, PhD	Marzieh Kadkhodaei Golmakani Olivia Sattayapiwat	2015-2019	Committee Chair	PhD Candidate in Biostatistics
Diana Miglioretti, PhD	Adam Furst	2017- current	Committee Chair	PhD Candidate in Biostatistics

Diana Miglioretti, PhD	Olivia Sattayapiwat	2019- current	Committee Chair	PhD Candidate in Biostatistics
Eleanor Bimla Schwarz, MD, MPH	Melissa Chen, MD, MPH.	2016- current	Understanding the Lactational Amenorrhea Method of Contraception for Mothers of Preterm and Term Infants	Assistant professor, Department of Ob/GYN, UC Davis
Eleanor Bimla Schwarz, MD, MPH	Laura Kair, MD, MPH.	2017- current	Telemedicine Breastfeeding Support following Late Preterm Delivery: A Randomized Controlled Trial	Assistant professor Department of Pediatrics, UC Davis
Eleanor Bimla Schwarz, MD, MPH	Dawnte' Early, PhD	2015		UCSF Bixby Center for Global Health
Eleanor Bimla Schwarz, MD, MPH	M. Catrina D. Jaime, PhD		Post-doctoral fellow, in Quality Safety and Comparative Effectiveness Research	Adjunct Assistant Professor, Director Public Health and Equity, Mills College
Eleanor Bimla Schwarz, MD, MPH	Melanie Dove, PhD, ScD	2017-2019	Post-doctoral fellow, in Quality Safety and Comparative Effectiveness Research	Adjunct Assistant Professor; UC Davis Department of Public Health Sciences
Eleanor Bimla Schwarz, MD, MPH	Caitlin Gerdts, PhD	2014– 2015	Junior faculty in epidemiology	University of California, San Francisco
Eleanor Bimla Schwarz, MD, MPH	Jill Radtke Demirci, PhD, RN, IBCLC	2016	Preventing perceived insufficient milk: development of a text message-based intervention	Assistant professor, University of Pittsburgh, School of Nursing, Department of Health Promotion & Development
Eleanor Bimla Schwarz, MD, MPH	Lisa Callegari, MD, MPH	2015-2019	VA Health Services Research & Development (HSR&D), Career Development Program CDA 14- 412 Reproductive Planning for Women Veterans	MPH assistant professor, Department of Ob/GYN, University of Washington
Eleanor Bimla Schwarz, MD, MPH	Nicole Crane Finney,	2019-2020	Women's Health	Medical Student at UC Irvine MPH candidate, University of California, Davis

Eleanor Bimla Schwarz, MD, MPH	Maneesha Muriki	2019-2020	Women's Health	MPH candidate University of California, Davis
Eleanor Bimla Schwarz, MD, MPH	Elizabeth Krans, MD	2011– 2017	Buprenorphine Assignment in Pregnancy: Objective Criteria,	Assistant professor of obstetrics and gynecology, University of Pittsburgh.
Daniel Tancredi, PhD	Sally C. Moyce	2015-2016	Dissertation research advisee,	Assistant Professor, Montana State University
Daniel Tancredi, PhD	Shuyang Li	2015-18	Statistics PhD Candidate, Graduate Student Researcher	Quantitative Associate, Wells Fargo
Daniel Tancredi, PhD	Oanh Nguyen, PhD	2015-17	Mentee, Assistant Professor	UCD Latino Aging Research Resource Center
Daniel Tancredi, PhD	Bryn Mumma, MD, MAS	2016- current	K08 Mentored Clinical Scientist Research Mentee	Associate Professor, Department of Emergency Medicine UC Davis
Daniel Tancredi, PhD	Cesaire Ouedraogo, PhD	2017-19	Dissertation committee, Nutrition Biology	Scientist for an international non-governmental organization
Garth Utter, MD	Daniel Shouldice, MD	2014-2015	Research on therapeutic anticoagulation	Resident, Emergency Medicine, University of Washington
Garth Utter, MD	Jacqueline Stocking, RN PhD	2017-2019	Patient safety indicator (Postoperative respiratory failure) evaluation and update	Assistant Adjunct Professor, UC Davis Department of Internal Medicine
Garth Utter, MD	Nikia McFadden, MD	2019-2021	Researched emergency surgical patient experiences during the discharge process	UC Davis Mentored Clinical Research Training Program- K30 Fellow
Glen Xiong, MD	Medical Student Career Advisor	2010- current	Advising for 20-23 medical students annually (4-6 students per MS1- MS4 year)	Residents and faculty at medical institutions across the U.S.

Appendix 2 Table 3. Current Post-Doctoral Fellows

Fellow Name (Start Year)	Training Program	Department/ Affiliation	Mentor(s)	Project(s)
Katherine Glaser, MD, MPH (2020-present)	QSCERT-PC	TBD	TBD	Joined the QSCERT-PC fellowship August 2020
Brittany Chatterton, MD (2020-present)	QSCERT-PC	Department Internal Medicine	TBD	Joined the QSCERT-PC fellowship August 2020
Adrienne Hoyt- Austin, DO (2019-present)	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.
Anne Clark White, PhD (2017-present)	QSCERT-PC	Department of Internal Medicine	Dr. Stephen Henry; Dr. Richard Kravitz	Analyzing qualitative data from visits with patients using opiates to treat chronic pain to identify challenges and successes in establishing provider-patient therapeutic alliances
Logan Trenaman, PhD	Post-doctoral fellow	Department of Public Health Sciences	Dr. Jeffrey Hoch	Health economics research on net benefits of regression and applied use of cost-effectiveness by ICER
I. Erik Tseregounis, PhD	Post-doctoral fellow	Department of Internal Medicine	Dr. Stephen Henry	Risk-prediction analysis and model development for opioid- related harms
Gayatri Patel, MD, MPH	Post-doctoral fellow	Department of Internal Medicine	Dr. Ruby Shah	Medical expenditures in overweight and obese children in the U.S.
Beatrice Tettah	Post-doctoral fellow	Department of Pediatrics	TBD	TBD

Appendix 2 Table 4. Graduates of CHPR Research Training Programsa: Current Employment and Career Development Activities

Graduate Name	Research Program	Career Development Activity/Placement
Estella Geraghty, M (2005		Chief Medical Officer and Health Solutions Director, Esri, Redlands, CA
Jann Murray-Garcia, M (2005	PCOR	Associate clinical professor (founding faculty member) UC Davis Betty Irene Moore School of Nursing
Svetlana Popova, M (2007		Family Physician, Sacramento, CA
Erik Fernandez y Garcia, MD, MP (2007		Associate Professor, UC Davis Department of Pediatrics
Christopher Moreland, MD, MP (2009		Associate Professor Hospitalist (University of Texas-San Antonio Health Science Center)
Jeannette Berrong M (2011		Private Practitioner (Woodland, CA)
Nicholas Sikic, M (2011		Pediatrician, University of Arizona
Rachel Hollander, M (2013)		Physician, Sutter Health (Aptos, CA)
Edward Cruz, M (2013		Pediatrician, San Francisco Health Network, Children's Health Center, Zuckerberg San Francisco General Hospital
Beatrice Tettah, M (2013		Pediatrician (Pediatric Urgent Care of Sacramento, CA)
Ruby Shah, MD, MP (2013		Internal Medicine Physician, Houston Methodist
Gayatri Patel, M (2014		Associate Physician, UC Davis Department of General Medicine
Allen Tong, M (2014		Physician, Senior Care Center, San Mateo Medical Center, California
Anna Lee Amarnath (DeSista) ME MP (2014	H	Medical Program Consultant and Section Chief, Medi-Cal Managed Care Program, California State Department of Health Care Services
Anthony Carden, MD, MP (2015		Anacapa Surgical Associates - General Surgery, Advanced Trauma Life Support, Laparoscopic Surgery, Bariatric and Robotic Surgery (Ventura, CA)
David Chin, Ph (2015)	Assistant Professor of Health Policy and Management, Health Promotion and Policy at the University of Massachusetts, Amherst
Tejveer Dhillon, MD, MA (2015))	General Surgeon, Adventist Health Physicians Network Bariatric and General Surgery, Yuba City, California
James Chenoweth, MD, MA (2016)	Assistant Professor, UC Davis Department of Emergency Medicine
Yichen Lin, Ph (2016		Chief Toxicologist, Safety and Health Technology Center, a private company providing technical support to public agencies and assisting industry customers with international standards
Lindsey Woodworth, Ph (2016		Assistant Professor, Department of Economics, University of South Carolina, Columbia
Susan Perez, Ph (2016)	Assistant Professor, Department Public Health, California State University at Sacramento
Emily White VanGompel, MD, MP (2016		Assistant Professor of Family Medicine, University of Chicago
Michelle Hamline, MD, Ph (2016)	Pediatric Hospitalist, UC Davis Children's Hospital
Brock Daniels, MD, MPH, MA (2017		Assistant Professor, Department of Emergency Medicine at New York Presbyterian Hospital and the Weil Cornell School of Medicine
Robert Doiron, MD, MA (2017		Resident, UC Davis Department of Surgery

Jessie Pintor (Kemmick), PhD, MPH (2017) Ethan Evans, PhD (2018)	QSCERT QSCERT	Assistant Professor, Department of Health Management & Policy at the Dornsife School of Public Health, Drexel University Assistant Professor, College of Health and Human Services, Division of Social Work, California State University Sacramento
Sarah Bateni, MD, MAS (2018)	QSCERT	Resident, UC Davis Department of Surgery
Hood-Medland, Eve Angeline, MD (2019)	QSCERT-PC	Physician, California Department of Corrections and Rehabilitation
Aimee Moulin, MD, MAS (2018)	QSCERT	Associate Professor, Department of Emergency Medicine, University of California Davis, School of Medicine Department
Christopher Kim, MD, MPH (2016)	QSCERT-PC	Assistant Professor, UC Davis Department of Pediatrics
Jessica Cox (Bowman), MD, MAS, PhD (2019)	QSCERT	Resident, UC Davis Department of Surgery
Maria Catrina Diestro Jaime, PhD (2019)	QSCERT	Assistant Adjunct Professor, Public Health and Health Equity, Mills College, Oakland, California
Melanie Dove, PhD, ScD (2019)	QSCERT-PC	Adjunct Assistant Professor, UC Davis Department of Public Health Sciences
Sarah Kahle, MA, EdM, PhD (2020)	QSCERT-PC	Post-doctoral scholar, UC Davis MIND Institute - Department of Psychiatry and Behavioral Sciences and the Department of Pediatrics' CAARE Diagnostic and Treatment Center
Ronit Ridberg, PhD (2020)	QSCERT-PC	Post-doctoral scholar, UC Davis Betty Irene Moore School of Nursing; Manager, UC Davis Precision Nutrition Program
Seonhwa Lee, PhD (2020)	QSCERT-PC	Marriage and family counselor, Wisconsin Lutheran Child and Family Services. Inc.
Nicole Bloser-Gabler 2006-2010)	Other	Research Scholar, University of Pennsylvania
Banafsheh Sadeghi, MD (2007-2010)	Other	Adjunct Assistant Professor (UC Davis –General Medicine)
Naomi Saito, MS (2008)	Other	Statistician (UC Davis-Public Health Sciences)
Janie Shelton, PhD (2008-2012)	Other	Analyst (United Nations Office on Drugs and Crime)
Yun (Wendy) Jiang, PhD (2009-2014)	Other	Research Scientist, Gilead Sciences, Oakland, CA
Zhou Yang, PhD ^b (2010-2011)	Other	Associate Principal Scientist, Merck, Philadelphia PA
John Clark ^b (2011)	Other	
Michael Urbich ^b (2012)	Other	Health Economist at Boehringer Ingelheim
Jiang Li ^b	Other	
(2012-2014) Timothy Morton ^b	Other	
(2013) Ayse Tescan, PhD	Other	Director, Clinical Operations and Data Management at
(2015)		Foundation Medicine, San Diego, California
Ethan Evans (2015-2016)	Other	Assistant Professor, College of Health and Human Services, Division of Social Work, California State University Sacramento
Eduard Poltavskiy, PhD (2014-2018)	Other	UC Davis Department of Biostatistics

^a Programs include: HRSA PCOR Fellowship program dates: 2003-2012; AHRQ QSCERT Fellowship program dates: 2013-2019; HRSA QSCERT-PC Fellowship program dates: 2016-present; Other training for post-docs or graduate student researchers.

^b Visiting scholar.

Appendix 3. Membership

Appendix 5 Table 1. CHPR Current Members

Member	Title	Department
Alicia Agnoli, MD, MPH, MHS	Assistant Professor	Dept. of Family and Community Medicine, SOM
Sergio Aguilar-Gaxiola, MD, PhD	Professor	Internal Medicine, SOM
Rina Alcalay, PhD	Professor Emeritus	Dept. of Communication, UC Davis
*Jared Ament, MD, MPH	Neurosurgeon	Sierra Neuroscience Institute, Adventist Health
Thomas Anders, MD (RETIRED)	Professor Emeritus	Psychiatry and Behavioral Science/UC Davis M.I.N.D. Institute, SOM
Rahman Azari, PhD	Lecturer Emeritus	Dept. of Statistics, UC Davis
Dian Baker, PhD, APRN-BC, PNP	Professor	Betty Irene Moore School of Nursing, UC Davis
Debra Bakerjian, PhD, RN, FNP	Clinical Professor	Betty Irene Moore School of Nursing, UC Davis
Heejung Bang, PhD	Professor	Dept. of Public Health Science, UC Davis
Laurel Beckett, PhD (RETIRED)	Distinguished Professor and Chief	Dept. of Public Health Science, Div. of Biostatistics, UC Davis
*Erik Bell, PhD	Research Program Specialist	Center for Innovation-BPPP Group, CalPERS
Robert Bell, PhD	Professor Emeritus	Dept. of Communications, UC Davis
Lars Berglund, MD, PhD	Associate Vice Chancellor/Vice Dean for Research, Professor	Biomedical Research/Dept. of Internal Medicine
Klea Bertakis, MD, MPH	Professor and Chair	Dept. of Family and Community Medicine
*Dru Bhattacharya, JD, MPH, LLM	Assistant Professor	Loyola University Medical Center
Eleanor Bimla Schwarz, MD, MPH, MS	Professor	Dept. of Internal Medicine
Richard Bold, MD	Chief of Surgical Oncology	Dept. of Surgery
Susan Brown, PhD	Associate Professor	Internal Medicine
Lisa Brown, MD, MAS	Assistant Professor of Thoracic Surgery	Dept. of Surgery
Robert Byrd, MD, MPH	Professor of Clinical Pediatrics	Dept. of Pediatrics
Edward Callahan, PhD	Past Associate Dean for Academic Personnel, Professor	Office of the Dean, SOM/Dept. of Family and Community Medicine
Colin Cameron, PhD	Professor	Dept. of Economics
Diana Cassady, MPH, PhD	Adjunct Professor	Dept. of Public Health Sciences

*Magdalena Cerda, DrPH, MPH	Associate Professor	Dept. of Population Health and Dept of EM/NYU Langone Health
Caroline Chantry, MD (RETIRED)	Professor of Clinical Pediatrics	Dept. of Pediatrics
Rosemary Cress, DrPH	Adjunct Associate Professor	Dept. of Public Health Sciences
Stephanie Crossen, MD, MPH	Assistant Professor	Dept. of Pediatrics
Lorien Dalrymple, MD, MPH	Associate Professor	Dept. of Internal Medicine
Elizabeth David, MD, FACS	Assistant Professor	Dept of Surgery
*Adela de la Torre, PhD	President, California State Board of Trustees	San Diego State University
Natalia Deeb-Sossa, PhD	Associate Professor	Dept. of Sociology
Robert Derlet, MD	Professor Emeritus	Dept. of Emergency Medicine
Christiana Drake, PhD	Professor	Dept. of Statistics
Jonathan Ducore, MD, MPH	Professor	Dept. of Pediatrics
L Elaine Waetjen, MD	Professor	Dept. of Obstetrics and Gynecology
Josh Elder, MD, MPH, MHS	Staff Physician	Dept. of Emergency Medicine
Tonya Fancher, MD, MPH	Associate Professor	Internal Medicine Residency Program
Diana Farmer, MD	Chair and Pearl Stamps Stewart Professor	Dept. of Surgery
Bo Feng, PhD	Professor Professor of Communication	Dept. of Communication
	Professor	
Bo Feng, PhD	Professor Professor of Communication	Dept. of Communication Dept. of Family and Community
Bo Feng, PhD Joshua Fenton, MD, MPH	Professor Professor of Communication Professor Associate Professor of Clinical	Dept. of Communication Dept. of Family and Community Medicine Dept. of Pediatrics Dept. of Radiology and Biomedical Imaging/UCSF Dept.
Bo Feng, PhD Joshua Fenton, MD, MPH Erik Fernandez y Garcia, MD, MPH	Professor Professor of Communication Professor Associate Professor of Clinical Pediatrics	Dept. of Communication Dept. of Family and Community Medicine Dept. of Pediatrics Dept. of Radiology and
Bo Feng, PhD Joshua Fenton, MD, MPH Erik Fernandez y Garcia, MD, MPH *Benjamin Franc, MD, MS	Professor Professor of Communication Professor Associate Professor of Clinical Pediatrics Professor of Clinical Radiology	Dept. of Communication Dept. of Family and Community Medicine Dept. of Pediatrics Dept. of Radiology and Biomedical Imaging/UCSF Dept. of Radiology and Imaging Dept. of Family and Community
Bo Feng, PhD Joshua Fenton, MD, MPH Erik Fernandez y Garcia, MD, MPH *Benjamin Franc, MD, MS Peter Franks, MD	Professor Professor of Communication Professor Associate Professor of Clinical Pediatrics Professor of Clinical Radiology Professor	Dept. of Communication Dept. of Family and Community Medicine Dept. of Pediatrics Dept. of Radiology and Biomedical Imaging/UCSF Dept. of Radiology and Imaging Dept. of Family and Community Medicine
Bo Feng, PhD Joshua Fenton, MD, MPH Erik Fernandez y Garcia, MD, MPH *Benjamin Franc, MD, MS Peter Franks, MD Jorge Garcia, MD, MS	Professor Professor of Communication Professor Associate Professor of Clinical Pediatrics Professor of Clinical Radiology Professor Associate Clinical Professor	Dept. of Communication Dept. of Family and Community Medicine Dept. of Pediatrics Dept. of Radiology and Biomedical Imaging/UCSF Dept. of Radiology and Imaging Dept. of Family and Community Medicine Dept. of Internal Medicine
Bo Feng, PhD Joshua Fenton, MD, MPH Erik Fernandez y Garcia, MD, MPH *Benjamin Franc, MD, MS Peter Franks, MD Jorge Garcia, MD, MS Lorena Garcia, MPH, PhD	Professor Professor of Communication Professor Associate Professor of Clinical Pediatrics Professor of Clinical Radiology Professor Associate Clinical Professor Professor	Dept. of Communication Dept. of Family and Community Medicine Dept. of Pediatrics Dept. of Radiology and Biomedical Imaging/UCSF Dept. of Radiology and Imaging Dept. of Family and Community Medicine Dept. of Internal Medicine Dept. of Public Health Sciences
Bo Feng, PhD Joshua Fenton, MD, MPH Erik Fernandez y Garcia, MD, MPH *Benjamin Franc, MD, MS Peter Franks, MD Jorge Garcia, MD, MS Lorena Garcia, MPH, PhD Drew Halfmann, PhD	Professor Professor of Communication Professor Associate Professor of Clinical Pediatrics Professor of Clinical Radiology Professor Associate Clinical Professor Professor Associate Professor	Dept. of Communication Dept. of Family and Community Medicine Dept. of Pediatrics Dept. of Radiology and Biomedical Imaging/UCSF Dept. of Radiology and Imaging Dept. of Family and Community Medicine Dept. of Internal Medicine Dept. of Public Health Sciences Dept. of Sociology

*Julie Herlihy, MD, MPH	Clinical Associate Professor	Dept. of Pediatrics/BU School of Medicine
*Peter Hilsenrath, PhD	Professor of Economics	University of the Pacific
*Donald Hilty, MD	Chair and Program Director	Kaweah Delta Medical Center
Ladson Hinton, MD	Professor and Director	Dept. of Psychiatry & Behavioral Sciences
Calvin Hirsch, MD	Professor of Clinical Internal Medicine	Dept. of Internal Medicine
Jeffrey Hoch, PhD	Associate Director Professor and Chief	Dept. of Public Health Sciences
James Holmes, MD, MPH	Professor and Vice Chair	Dept. of Emergency Medicine
Misty Humphries, MD, MAS, RPVI, FACS	Assistant Professor	Dept. of Surgery
Frederick J Meyers, MD	Professor	Dept. of Internal Medicine and Pathology
Anthony J Urquiza, PhD	Clinical Professor	Dept. of Pediatrics
Anthony Jerant, MD	Professor and Chair	Dept. of Family and Community Medicine
*Kermit Jones, MD, JD	Internal Medicine Physician/Healthcare Policy Advisor	Kaiser Permanente
Jill Joseph, MD, PhD, MPH	Associate Dean for Research/Professor	Betty Irene Moore School of Nursing, UC Davis
*Nancy Joye, MD (RETIRED)	Clinical Professor	Dept. of Pediatrics
Laura Kair, MD	Assistant Professor of Clinical Pediatrics	Dept. of Pediatrics
Gerald Kayingo, PhD, PA-C	Assistant Clinical Professor	Betty Irene Moore School of Nursing, UC Davis
Theresa Keegan, PhD, MS	Associate Professor	Cancer Epidemiology
Katherine Kim, MPH	Assistant Professor	Betty Irene Moore School of Nursing, UC Davis
Sunny Kim, PhD	Assistant Professor	Dept. of Public Health Sciences
Penelope Knapp, MD	Professor Emerita	Dept. of Psychiatry & Pediatrics
Michelle Ko, PhD, MPH	Assistant Professor	Dept. of Public Health Sciences
Patrick Koga, MD, MPH	Assistant Clinical Professor	Dept. of Public Health Sciences
Richard Kravitz, MD, MSPH	Professor/Co-Vice Chair	Dept. of Internal Medicine/Research
Nathan Kupperman, MD, MPH	Professor and Chair	Dept. of Emergency Medicine

Byung Kwang (Koo) Yoo, PhD	Associate Professor	Dept. of Public Health Sciences
Paul Leigh, PhD	Professor	Dept. of Public Health Sciences
Su-Ting Li, MD	Associate Professor	Dept. of Pediatrics
*Zhongmin Li, PhD	Associate Adjunt Professor	Dept. of Internal Medicine
Ming-Cheng Lo, PhD	Professor	Dept. of Sociology
Mary Lou Siantz, PD, RN, FAAN	Professor Emeritus	Betty Irene Moore School of Nursing
*Albert Lowey-Ball, MA, MS	Principal and Health Economics Advisor	Alba, Inc.
*Donald Lyman, MD, DTPH (RETIRED)	Chief, Division of Chronic & Injury Control	California Dept. of Health Sciences
Elizabeth Magnan, MD, PhD	Assistant Professor	Dept. of Family and Community Medicine
James Marcin, MD, MPH	Professor	Dept. of Pediatrics
Helene Margolis, PhD, MA	Assistant Adjunct Professor	Dept. of Internal Medicine
Larissa May, MD, MSPH, MSHS	Associate Professor	Dept. of Emergency Medicine
Craig McDonald, MD	Professor and Chair	Dept. of Physical Med. & Rehabilitation
Alvaro Medel-Herrero, PhD, MBA	Assistant Project Scientist	Center for Health and the Environment
Joy Melnikow, MD, MPH	Director/Professor	Center for Healthcare Policy and Research/Dept. of Family and Community Medicine
Diana Miglioretti, PhD	Dean's Professor	Dept. of Public Health Sciences
Aimee Moulin, MD	Associate Clinical Professor	Dept. of Emergency Medicine
Hans-Georg Mueller, MD, PhD	Distinguished Professor and Chair	Dept. of Statistics
Jann Murray-Garcia, MD, MPH	Associate Clinical Professor	Betty Irene Moore School of Nursing
Thomas Nesbitt, MD, MPH	Professor	Dept. of Family and Community Medicine
Hien Nguyen, MD, MAS	Associate Health Sciences Clinical Professor of Medicine	Dept. of Internal Medicine
Tara Niendam, PhD	Assistant Professor in Residence	Dept. of Psychiatry & Behavioral Sciences
Daniel Nishijima, MD	Associate Professor	Dept. of Emergency Medicine
Miriam Nuno, PhD	Associate Professor	Dept. of Public Health Science
James Nuovo, MD	Professor	Dept. of Family and Community Medicine

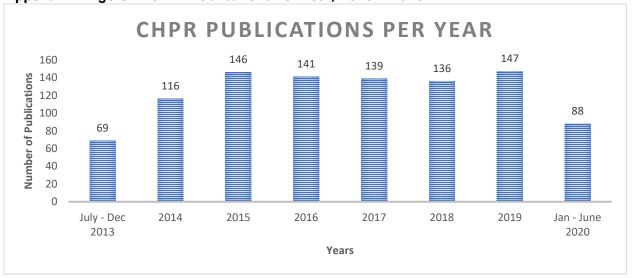
Leonor Pabon Fernando, MD	Director of Apheresis/MSP Staff Physician	Dept. of Pathology and laboratory Medicine
Donald Palmer, PhD	Professor	Graduate School of Management
Richard Pan, MD, MPH	Pediatrician, Senator	California State Senator, District 6
Jeanny Park, MD	Associate Clinical Professor	Dept. of Pediatrics
Debora Paterniti, PhD	Adjunct Professor	Dept. of Internal Medicine and Sociology
*Susan Perez, PhD	Assistant Professor, Kinesiology and Health Science	California State University, Sacramento
Shin Ping Tu, MD, MPH, FACP	Chief and Professor	Dept. of Internal Medicine
Bonnie Raingruber, RN, PhD	Adjunct Professor	Dept. of Hematology and Oncology
Julie Rainwater, PhD	Director	CTSC
Ben Rich, PhD	Professor	Dept. of Internal Medicine
John Robbins, MD, MHS	Professor Emeritus	Dept. of Internal Medicine
David Rocke, PhD	Distinguished Professor	Dept. of Public Health Sciences
Patrick Romano, MD, MPH	Professor	Dept. of Internal Medicine
Jennifer Rosenthal, MD	Assistant Professor	Dept. of Pediatrics
0 0 00	Distinguished Duefessey Empuision	Dept. of Statistics
George Roussas, PhD	Distinguished Professor Emeritus	Dept. of Statistics
Michael S Wilkes, MD, PhD	Professor	Dept. of Internal Medicine
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Michael S Wilkes, MD, PhD	Professor	Dept. of Internal Medicine
Michael S Wilkes, MD, PhD *Thomas Sanchez, MD	Professor Associate Professor	Dept. of Internal Medicine Dept. of Radiology
Michael S Wilkes, MD, PhD *Thomas Sanchez, MD Christian Sandrock, MD, MPH, FCCP	Professor Associate Professor Professor	Dept. of Internal Medicine Dept. of Radiology Dept. of Internal Medicine
Michael S Wilkes, MD, PhD *Thomas Sanchez, MD Christian Sandrock, MD, MPH, FCCP Marc Schenker, MD, MPH	Professor Associate Professor Professor Distinguished Professor Trauma Surgery and Critical	Dept. of Internal Medicine Dept. of Radiology Dept. of Internal Medicine Dept. of Public Health Sciences
Michael S Wilkes, MD, PhD *Thomas Sanchez, MD Christian Sandrock, MD, MPH, FCCP Marc Schenker, MD, MPH *Carol Schermer, MD, MPH	Professor Associate Professor Professor Distinguished Professor Trauma Surgery and Critical Care	Dept. of Internal Medicine Dept. of Radiology Dept. of Internal Medicine Dept. of Public Health Sciences Medical Director Urology Astellas Dept. of Psychiatry and
Michael S Wilkes, MD, PhD *Thomas Sanchez, MD Christian Sandrock, MD, MPH, FCCP Marc Schenker, MD, MPH *Carol Schermer, MD, MPH Julie Schweitzer, MD	Professor Associate Professor Professor Distinguished Professor Trauma Surgery and Critical Care Professor	Dept. of Internal Medicine Dept. of Radiology Dept. of Internal Medicine Dept. of Public Health Sciences Medical Director Urology Astellas Dept. of Psychiatry and Behavioral Sciences
Michael S Wilkes, MD, PhD *Thomas Sanchez, MD Christian Sandrock, MD, MPH, FCCP Marc Schenker, MD, MPH *Carol Schermer, MD, MPH Julie Schweitzer, MD Ulfat Shaikh, MD, MPH	Professor Associate Professor Professor Distinguished Professor Trauma Surgery and Critical Care Professor Professor	Dept. of Internal Medicine Dept. of Radiology Dept. of Internal Medicine Dept. of Public Health Sciences Medical Director Urology Astellas Dept. of Psychiatry and Behavioral Sciences Dept. of Pediatrics
Michael S Wilkes, MD, PhD *Thomas Sanchez, MD Christian Sandrock, MD, MPH, FCCP Marc Schenker, MD, MPH *Carol Schermer, MD, MPH Julie Schweitzer, MD Ulfat Shaikh, MD, MPH Jeffrey Sherman, PhD *Alan Shindel, MD Elena Siegel, PhD, RM	Professor Associate Professor Professor Distinguished Professor Trauma Surgery and Critical Care Professor Professor Professor Associate Professor Associate Professor	Dept. of Internal Medicine Dept. of Radiology Dept. of Internal Medicine Dept. of Public Health Sciences Medical Director Urology Astellas Dept. of Psychiatry and Behavioral Sciences Dept. of Pediatrics Dept. of Psychology Male Reproductive Health/UCSF Betty Irene Moore School of Nursing
Michael S Wilkes, MD, PhD *Thomas Sanchez, MD Christian Sandrock, MD, MPH, FCCP Marc Schenker, MD, MPH *Carol Schermer, MD, MPH Julie Schweitzer, MD Ulfat Shaikh, MD, MPH Jeffrey Sherman, PhD *Alan Shindel, MD	Professor Associate Professor Professor Distinguished Professor Trauma Surgery and Critical Care Professor Professor Professor Associate Professor	Dept. of Internal Medicine Dept. of Radiology Dept. of Internal Medicine Dept. of Public Health Sciences Medical Director Urology Astellas Dept. of Psychiatry and Behavioral Sciences Dept. of Pediatrics Dept. of Psychology Male Reproductive Health/UCSF Betty Irene Moore School of

Marjorie Solomon, PhD, MBA	Professor	Clinical Psychology
*Malathi Srinivasan, MD	Clinical Professor	PCPH, Stanford Medicine
Aubyn Stahmer, PhD	Professor	Dept. of Psychiatry and Behavioral Sciences
Ann Stevens, PhD	Professor	Dept. of Economics
Dennis Styne, MD	Professor	Dept. of Pediatrics
Farzaneh Tabnak, PhD	Assistant CE Specialist in Agriculture Safety and Health	Dept. of Biological and Ag Engineering
Daniel Tancredi, PhD	Assistant Professor in Residence	Dept. of Pediatrics
Laramie Taylor, PhD	Professor	Dept. of Communication
David Tom Cooke, MD	Head, and Program Director/Associate Professor	Cardiothoracic Surgery Residency/Dept. of Surgery
Elisa Tong, MD, MA	Associate Professor	Dept. of Internal Medicine
Garth Utter, MD	Associate Professor of Surgery	Dept. of Surgery
Judith Van de Water, PhD	Professor	Dept. of Internal Medicine
Jane-Ling Wang, PhD	Distinguished Professor	Dept. of Statistics
Deborah Ward, PhD (RETIRED)	Associate Clinical Professor	Betty Irene Moore School of Nursing
Richard White, MD	Professor of Medicine	Dept. of Internal Medicine
Jean Wiedeman, MD, PhD	Associate Professor	Dept. of Pediatrics
*Barth Wilsey, MD	Associate Physician	Dept. of Psychiatry and Anesthesiology
David Wisner, MD	Professor and Vice Chair	Dept. of Surgery
Glen Xiong, MD	Health Sciences Clinical Professor	Betty Irene Moore School of Medicine
Heather Young, PhD, RN, GNP, FAAN	Professor and Dean Emerita	Betty Irene Moore School of Medicine
Nolan Zane, PhD	Professor Emeritus	Dept. of Psychology

^{*} Indicates Affiliate membership

Appendix 4. Publications

Appendix 4 Figure 1. CHPR Publications Per Year, 2013 – 2020







Appendix 4 Table 1. PUBMED Links for CHPR members with active projects, 2014 – 2020

CHPR member	Publications
Leadership	
Joy Melnikow	https://tinyurl.com/yxpyvtfb
Director	
Jeffrey Hoch	https://tinyurl.com/y5cxjbq7
Associate Director	
James Holmes	https://tinyurl.com/y42yd3m3
Leadership Team	
Patrick Romano	https://tinyurl.com/y4xrk32o
Leadership Team	
Bimla Schwartz	https://tinyurl.com/y2my8672
Leadership Team	
CHPR Methods Experts	
Melissa Gosdin	https://tinyurl.com/y28u5bny
Qualitative Expert	
Daniel Tancredi	https://tinyurl.com/y6j4e35t
Biostatistics Expert	
CHPR Members with recent active projects	
Alicia Agnoli	https://tinyurl.com/y4outy6z
Joshua Fenton	https://tinyurl.com/y2y2aelu
Stephen Henry	https://tinyurl.com/y222fklz
Tony Jerant	https://tinyurl.com/y2aaqajt
Ian Koebner	https://tinyurl.com/y3zbussq
Rich Kravitz	https://tinyurl.com/yyy7ax4p
Nate Kuppermann	https://tinyurl.com/y59lpd43
Beth Magnan	https://tinyurl.com/y3cp4lxf
James Marcin	https://tinyurl.com/y6gnkp9d
Daniel Nishijima	https://tinyurl.com/yxul8nn7
Elisa Tong	https://tinyurl.com/y6myxwzy
Garth Utter	https://tinyurl.com/y5x8oqe3
Sergio Aguilar-Gaxiola	https://tinyurl.com/y4lau2kp
Bryn Mumma	https://tinyurl.com/y64nfeuk
Jacqueline Stocking	https://tinyurl.com/yxhwt47n
Glen Xiong	https://tinyurl.com/y5x4rlj4

Appendix 4 List of California Health Benefits Review Program (CHBRP) Reports 2014 -2020 on which CHPR Faculty Members and Staff Contributed.

CHPR Faculty Members are noted in bold and Staff by ** Contributed

- 1. California Health Benefits Review Program (CHBRP). (2014). Analysis of California Assembly Bill 1771: Telephonic and Electronic Patient Management. Oakland, CA. (CHPR contributors: Ronald Fong, MD, MPH, Stephen McCurdy, MD, MPH, Dominique Ritley,** MPH, Meghan Soulsby,** MPH, Byung-Kwang Yoo, MD, MS, PhD, Joy Melnikow, MD, MPH.)
- 2. California Health Benefits Review Program (CHBRP). (2014). Analysis of California Assembly Bill 1917: Outpatient Prescription Drugs: Cost Sharing. Oakland, CA. (CHPR contributors: Ronald Fong, MD, MPH, Stephen McCurdy, MD, MPH, Dominique Ritley,** MPH, Meghan Soulsby,** MPH, Byung-Kwang Yoo, MD, MS, PhD, Patricia Zrelak, PhD, RN, CNRN, NEA-BC, Joy Melnikow, MD, MPH.)
- 3. California Health Benefits Review Program (CHBRP). (2014). Analysis of California Assembly Bill 2418: Prescription Drug Refills. Oakland, CA. (CHPR contributors: Ronald Fong, MD, MPH, Stephen McCurdy, MD, MPH, Dominique Ritley,** MPH, Meghan Soulsby,** MPH, Byung-Kwang Yoo, MD, MS, PhD, Patricia Zrelak, PhD, RN, CNRN, NEA-BC, Joy Melnikow, MD, MPH.)
- 4. California Health Benefits Review Program (CHBRP). (2014). Analysis of California Senate Bill 1053: Health Care Coverage: Contraceptives. Oakland, CA. (CHPR contributors: Meghan Soulsby,** MPH, Joy Melnikow, MD, MPH, prepared public health impact analysis; Byung-Kwang Yoo, MD, MS, PhD, prepared cost impact analysis.)
- 5. California Health Benefits Review Program (CHBRP). (2014). Analysis of California Senate Bill 1239: Pupil Health Care: School Nurses. Oakland, CA. (CHPR contributors on public health impact: Ronald Fong, MD, MPH, Dominique Ritley,** MPH, Patricia Zrelak, PhD, RN, CNRN, NEA-BC.)
- 6. California Health Benefits Review Program (CHBRP). (2015). Analysis of California Assembly Bill 374: Step Therapy Coverage. Oakland, CA. (CHPR contributors on public health impact: **Ronald Fong**, MD, MPH, **Dominique Ritley**,** MPH.)
- 7. California Health Benefits Review Program (CHBRP). (2015). Analysis of California Assembly Bill 502: Dental Hygiene. Oakland, CA. (CHPR contributors on public health impact: Shauna Durbin,** MPH, Stephen McCurdy, MD, MPH.)
- 8. California Health Benefits Review Program (CHBRP). (2015). Analysis of California Assembly Bill 623: Abuse-Deterrent Opioid Analgesics. Oakland, CA. (CHPR contributors on public health impact: **Dominique Ritley**,** MPH, **Meghan Soulsby Weyrich**,** MPH, **Joy Melnikow**, MD, MPH.)
- 9. California Health Benefits Review Program (CHBRP). (2015). Analysis of California Assembly Bill 796: Autism and Pervasive Developmental Disorders. Oakland, CA. (CHPR contributors on public health impact: **Diana Cassady**, DrPH, **Shauna Durbin**,** MPH.)
- 10. California Health Benefits Review Program (CHBRP). (2015). Analysis of California Assembly Bill 1102: Special Enrollment Periods. Oakland, CA. (CHPR contributor **Dominique Ritley**,** MPH, provided the public health findings.)

- 11. California Health Benefits Review Program (CHBRP). (2015). Analysis of California Assembly Bill 1305: Limitations on Cost-Sharing: Family Coverage. Oakland, CA. (CHPR contributor **Joy Melnikow**, MD, MPH, reviewed the analyses for accuracy, completeness, clarity and responsiveness to the Legislature's request.)
- 12. California Health Benefits Review Program (CHBRP). (2015). Analysis of California Senate Bill 190: Acquired Brain Injury. Oakland, CA. (CHPR contributors on public health impact: **Dominique Ritley**,** MPH, and **Diana Cassady**, DrPH.)
- 13. California Health Benefits Review Program (CHBRP). (2015). Analysis of California Senate Bill 289: Telephonic and Electronic Patient Management. Oakland, CA. (CHPR contributors on public health impact: Joy Melnikow, MD, MPH, Dominique Ritley,** MPH; James Marcin, MD, MPH, provided expert input on the analytic approach.)
- 14. California Health Benefits Review Program (CHBRP). (2016). Analysis of California Assembly Bill 1763: Colorectal Cancer Screening. Oakland, CA. CHPR contributors Shauna Durbin,** MPH, and Ronald Fong, MD, prepared the public health impact analysis.)
- 15. California Health Benefits Review Program (CHBRP). (2016). Analysis of California Assembly Bill 2004: Hearing Aids: Minors. Oakland, CA. (CHPR contributors **Diana Cassady**, DrPH, and **Dominique Ritley**,** MPH, prepared public health impact analysis.)
- 16. California Health Benefits Review Program (CHBRP). (2016). Analysis of California Assembly Bill 2084: Medi-Cal Coverage for Comprehensive Medication Management (CMM) Services. Oakland, CA. (CHPR contributors Ronald Fong, MD, and Meghan Soulsby Weyrich,** MPH, wrote the economic impact section.)
- 17. California Health Benefits Review Program (CHBRP). (2016). Analysis of California Assembly Bill 2209: Brief: Clinical Care Pathways. Oakland, CA. (CHPR contributor **Joy Melnikow**, MD, MPH, reviewed the analyses for accuracy, completeness, clarity and responsiveness to the Legislature's request, and **Meghan Soulsby Weyrich**,** MPH, contributed to the introductory and background sections of this brief.)
- 18. California Health Benefits Review Program (CHBRP). (2016). Analysis of California Assembly Bill 2372: HIV Specialists. Oakland, CA. (CHPR contributor **Dominique Ritley**,** MPH, prepared public health impact analysis.)
- 19. California Health Benefits Review Program (CHBRP). (2016). Analysis of California Assembly Bill 2507: Telehealth: Access. Oakland, CA. (CHPR contributors **Jeffrey Hoch**, PhD, and **Dominique Ritley**,** MPH, prepared cost and public health impact analysis, respectively.)
- 20. California Health Benefits Review Program (CHBRP). (2016). Analysis of California Assembly Bill 2764: Mammography. Oakland, CA. (CHPR contributors **Joy Melnikow**, MD, MPH, and **Meghan Soulsby Weyrich**,** MPH, prepared the medical effectiveness and public health impact analyses.)
- 21. California Health Benefits Review Program (CHBRP). (2016). Analysis of California Senate Bill 999: Contraceptives: Annual Supply. Oakland, CA. (CHPR contributors Joy Melnikow, MD, MPH, and Meghan Soulsby Weyrich,** MPH, prepared the public health impact analyses.)
- 22. California Health Benefits Review Program (CHBRP). (2016). *Analysis of California Senate Bill 1034: Autism*. Oakland, CA. (CHPR contributors **Diana Cassady**, DrPH, and **Shauna Durbin**,** MPH, prepared the public health impact analyses.)

- 23. California Health Benefits Review Program (CHBRP). (2017). Analysis of California Assembly Bill 391: Abbreviated Analysis: Medi-Cal: Asthma Preventive Services. Oakland, CA. (CHPR contributors Shauna Durbin,** MPH, and Ronald Fong, MD, prepared the public health impact analysis.)
- 24. California Health Benefits Review Program (CHBRP). (2017). Analysis of California Assembly Bill 447: Continuous Glucose Monitors. Oakland, CA. (CHPR contributors Elizabeth Magnan, MD, PhD, MPH, and Meghan Soulsby Weyrich,** MPH, prepared the medical effectiveness analysis, and Dominique Ritley,** MPH, prepared the public health impact analysis, and Oluseun Atolagbe,** MBBS, MPH, CCS, provided assistance with billing code verification.)
- 25. California Health Benefits Review Program (CHBRP). (2017). Analysis of California Assembly Bill 1074: Pervasive Developmental Disorder or Autism. Oakland, CA. (CHPR contributors **Diana Cassady**, DrPH, and **Dominique Ritley**,** MPH, prepared the public health impact analysis.)
- 26. California Health Benefits Review Program (CHBRP). (2017). Analysis of California Assembly Bill 1107: Abbreviated Analysis: Oncology Clinical Pathway Act of 2017. Oakland, CA. (CHPR contributor **Michelle Ko**, MD, PhD, prepared the cost analysis.)
- 27. California Health Benefits Review Program (CHBRP). (2017). Analysis of California Assembly Bill 1316: Childhood Lead Poisoning: Prevention. Oakland, CA. (CHPR contributors Ronald Fong, MD, and Meghan Soulsby Weyrich,** MPH, prepared the medical effectiveness analysis.)
- 28. California Health Benefits Review Program (CHBRP). (2017). Analysis of California Senate Bill 172: Fertility Preservation. Oakland, CA. (CHPR contributors **Diana Cassady**, DrPH, **Barry Hill**,** MPH, and **Dominique Ritley**,** MPH, prepared the public health impact analysis.)
- 29. California Health Benefits Review Program (CHBRP). (2017). Analysis of California Senate Bill 221: HIV Associated Lipodystrophy. Oakland, CA. (CHPR contributors Shauna Durbin,** MPH, and Elizabeth Magnan, MD, PhD, MPH, prepared the public health impact analysis, and Jeffrey Hoch, PhD, prepared the cost impact analysis.)
- 30. California Health Benefits Review Program (CHBRP). (2017). Analysis of California Senate Bill 399: Pervasive Developmental Disorder or Autism. Oakland, CA. (CHPR contributors **Diana Cassady**, DrPH, and **Dominique Ritley**,** MPH, prepared the public health impact analysis.)
- 31. California Health Benefits Review Program (CHBRP). (2018). Analysis of California Assembly Bill 1860: Cancer Treatment. Oakland, CA. (CHPR contributors Joy Melnikow, MD, MPH, and Dominique Ritley,** MPH, prepared the public health impact analysis.)
- 32. California Health Benefits Review Program (CHBRP). (2018). Analysis of California Assembly Bill 2193: Maternal Mental Health. Oakland, CA. (CHPR contributors Shauna Durbin,** MPH, Meghan Soulsby Weyrich,** MPH, and Eleanor Bimla Schwarz, MD, MS, prepared the medical effectiveness analysis.)
- 33. California Health Benefits Review Program (CHBRP). (2018). Analysis of California Assembly Bill 2342: BRCA Gene Mutations: Screening, Counseling, and Testing. Oakland, CA. (CHPR contributors Meghan Soulsby Weyrich,** MPH, Elizabeth Magnan, MD, PhD, MPH, prepared the medical effectiveness analysis, and Shauna

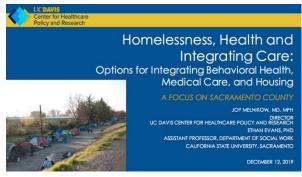
- **Durbin**,** MPH, and **Elizabeth Magnan**, MD, PhD, MPH, prepared the public health impact analyses, and **Michelle Ko**, MD, PhD, prepared the cost impact analysis.)
- 34. California Health Benefits Review Program (CHBRP). (2018). Analysis of California Assembly Bill 2384: Medication-Assisted Treatment. Oakland, CA. (CHPR contributors Ronald Fong, MD, and Dominique Ritley,** MPH, prepared the public health impact analysis.)
- 35. California Health Benefits Review Program (CHBRP). (2018). Analysis of California Senate Bill 1021: Prescription Drugs. Oakland, CA. (CHPR contributors on public health impact: Joy Melnikow, MD, MPH, Dominique Ritley,** MPH; Joy Melnikow, MD, MPH, and Shauna Durbin,** MPH, provided the medical effectiveness analysis.)
- 36. California Health Benefits Review Program (CHBRP). (2018). Analysis of California Senate Bill 1322: Medi-Cal: Comprehensive Medication Management. Oakland, CA. (CHPR contributor **Jeffrey Hoch**, PhD, prepared the cost impact analysis.)
- 37. California Health Benefits Review Program (CHBRP). (2019). Analysis of California Assembly Bill 166: Violence Prevention Services. Oakland, CA. (CHPR contributors on public health impact: **Dominique Ritley**,** MPH, and **Joy Melnikow**, MD, MPH; **Michelle Ko**, MD, MPH, provided the cost impact analysis.)
- 38. California Health Benefits Review Program (CHBRP). (2019). Analysis of California Assembly Bill 651: Air Ambulance Services. Oakland, CA. (CHPR contributor **Jeffrey Hoch**, PhD, helped prepare the cost impact analysis.)
- 39. California Health Benefits Review Program (CHBRP). (2019). Analysis of California Assembly Bill 744: Telehealth. Oakland, CA. (CHPR contributors on public health impact: **Dominique Ritley**,** MPH, and **Joy Melnikow**, MD, MPH; **James Marcin** provided technical assistance with the literature search and expert input on the analytical approach.)
- 40. California Health Benefits Review Program (CHBRP). (2019). Analysis of California Assembly Bill 767: Infertility. Oakland, CA. (CHPR contributors: Meghan Soulsby Weyrich,** MPH, and Elizabeth Magnan, MD, PhD, MPH, prepared the medical effectiveness analysis; Shauna Durbin,** MPH, and Elizabeth Magnan, MD, PhD, provided the public health impact analysis; and Joy Melnikow, MD, MPH, reviewed the analyses for accuracy, completeness, clarity and responsiveness to the Legislature's request.)
- 41. California Health Benefits Review Program (CHBRP). (2019). Analysis of California Senate Bill 11: Mental Health Parity and Substance Use Medications. Oakland, CA. (CHPR contributors on public health impact: Elizabeth Magnan, MD, PhD, MPH, and Dominique Ritley,** MPH.)
- 42. California Health Benefits Review Program (CHBRP). (2019). Analysis of California Senate Bill 600: Fertility Preservation. Oakland, CA. (Meghan Soulsby Weyrich,** MPH, and Elizabeth Magnan, MD, PhD, MPH, prepared the medical effectiveness analysis; Shauna Durbin,** MPH, and Elizabeth Magnan, MD, PhD, provided the public health impact analysis; and Joy Melnikow, MD, MPH, reviewed the analyses for accuracy, completeness, clarity and responsiveness to the Legislature's request.)
- 43. California Health Benefits Review Program (CHBRP). (2020). Analysis of California Assembly Bill 1904: Pelvic Floor Physical Therapy Coverage. Berkeley, CA. (Elizabeth Magnan, MD, PhD, and Meghan Soulsby Weyrich,** MPH, prepared the medical effectiveness analysis; Elizabeth Magnan, MD, PhD, MPH, Marykate Miller,** MS, and

- **Dominique Ritley**,** MPH, prepared the public health impact analysis; **Jeffrey Hoch**, PhD, prepared the cost impact analysis.)
- 44. California Health Benefits Review Program (CHBRP). (2020). Analysis of California
 Assembly Bill 2242: Mental Health Services. Berkeley, CA. (Joy Melnikow, MD, MPH, and
 Shauna Durbin,** MPH, prepared the public health impact analysis.)
- 45. California Health Benefits Review Program (CHBRP). (2020). Analysis of California Assembly Bill 2258: Doula Care: Medi-Cal Pilot Program. Berkeley, CA. (Shauna Durbin,** MPH, and Elizabeth Magnan, MD, PhD, prepared the medical effectiveness analysis; Elizabeth Magnan, MD, PhD, Marykate Miller,** MS, and Dominique Ritley,** MPH, prepared the public health impact analysis.)
- 46. California Health Benefits Review Program (CHBRP). (2020). Analysis of California Senate Bill 854: Health Care Coverage: Substance Use Disorders. Berkeley, CA. (Shauna Durbin,** MPH, Elizabeth Magnan, MD, PhD, and Meghan Soulsby Weyrich,** MPH, prepared the medical effectiveness analysis.)
- 47. California Health Benefits Review Program (CHBRP). (2020). Analysis of California Senate Bill 855: Health Coverage: Mental Health or Substance Abuse Disorders. Berkeley, CA. (Joy Melnikow, MD, MPH, and Dominique Ritley,** MPH, prepared the public health impact analysis.

Appendix 5. Conferences

Homelessness, Health and Integrating Care: Options for Integrating Behavioral Health, Medical Care, and Housing, Event held December 12, 2019

CHPR hosted more than 100 attendees at the UC Center Sacramento on December 12, 2019 to discuss the topic of "Homelessness, Health, and Integrating Care: Options for Integrating Behavioral Health, Medical Care, and Housing in Sacramento County."











LESSONS FROM MASSACHUSETTS FOR THE NEXT PHASE OF HEALTH CARE REFORM: 58% of Previously Uninsured Californians Have Insurance – Now What?

Date: Friday, March 6, 2015
Time: 9:00-11:30am
Location: University of California Center Sacramento
1130 K Street, Sacramento, CA 95814

As California continues on the path of health care reform implementation and considers next steps, new challenges and opportunities will arise. This free event will provide an opportunity for California policymakers, researchers, and other stakeholders to learn from the experiences of Massachusetts – the state that led the country in health care reform.

- How were implementation challenges addressed?
- · What drove recent legislation focused on cost containment and how effective has that been?
- What approach did the state take to insure network adequacy?

In an interactive session, speakers from Massachusetts and California will tackle these questions and others, including those raised by attendees. To register, please click here.

MASSACHUSETTS SPEAKERS INCLUDE:



MICHAEL DOONAN, PHD, MPA, ASSOCIATE PROFESSOR AND MPP PROGRAM DIRECTOR, THE HELLER SCHOOL FOR SOCIAL POLICY AND MANAGEMENT, BRANDEIS UNIVERSITY

Michael Doonan is an assistant professor at the Heller Graduate School at Brandeis University. He is the Executive Director of the Massachusetts Health Policy Forum, and Director of the Council for Health Care Economics and Policy. His research and publications focus on issues related to access to health care, Medicaid, SCHIP, federal/state relations, prescription drugs, public health, and the economics of health system change.



DOLORES MITCHELL, EXECUTIVE DIRECTOR, MASSACHUSETTS GROUP INSURANCE COMMISSION

The Group Insurance Commission provides health, dental, and vision services to the Commonwealth's employees, retirees, and their dependents. Mrs. Mitchell has led the Commission since 1987. She is a member of the Massachusetts Health Care Connector Authority, the Massachusetts Statewide Quality Advisory Committee (SQAC), and currently is President of the National Committee for Quality Assurance (NCQA) Board of Directors.



DANA GELB SAFRAN, SCD, SENIOR VICE PRESIDENT FOR PERFORMANCE MEASUREMENT AND IMPROVEMENT, BLUE CROSS BLUE SHIELD OF MASSACHUSETTS (BCBSMA)

Dana Gelb Safran leads BCBSMA's initiatives to measure and improve healthcare quality, safety and outcomes. Dr. Safran's advisory roles on national and local quality measurement include work with the Office of the National Coordinator (ONC), the Centers for Medicare and Medicaid Services (CMS), the National Committee for Quality Assurance (NCQA), and the Patient Centered Primary Care Collaborative (PCPCC).



DAVID SELTZ, EXECUTIVE DIRECTOR, MASSACHUSETTS HEALTH POLICY COMMISSION

David Seltz is the first Executive Director of the Massachusetts Health Policy Commission, which aims to modernize health care payment and delivery models to establish a more accountable, affordable system. Prior to this role, Mr. Seltz was the chief health care advisor for Senate President Therese Murray and then served as the Special Advisor on health care for Governor Deval Patrick (MA).

AGENDA

9:00am Breakfast

9:30am What can California Learn from Massachusetts as Health Care Reform Implementation Continues: A conversation with leaders from Massachusetts and California

 Confirmed speakers from California: <u>Jennifer Kent</u>, Director, California Department of Health Care Services; <u>Neal D. Kohatsu</u>, Medical Director, California Department of Health Care Services; and <u>Anthony Wright</u>, Executive Director, Health Access.

11:05am Questions from Attendees

Moderated by: Garen Corbett, MS, Executive Director, California Health Benefits Review Program

Sponsored by the University of Davis (UCD) Center for Healthcare Policy and Research, the UCD Poverty Research Center, the UC Center Sacramento, and the UC Office of the President

Planned Substance Use Conference

As part of the Substance Use Workgroup for Addiction Research (SUGAR), CHPR is planning to host a conference at the UC Davis Health campus. The conference will be held in late 2021 and will highlight the recent innovative clinical adaptations implemented by UC Davis physicians. It will create a platform on which UC Davis faculty from both the Davis and Sacramento campuses can come together and share their research, furthering the development of new and diverse research partnerships. The topic for the conference is opioid and methamphetamine disorders, as SUGAR has identified these as the most prominent substances challenging California currently. The current COVID-19 pandemic has delayed planning for this conference.

The 4th UC Davis Qualitative Health Research Symposium, 2018

The 4th UC Davis Qualitative Health Research Symposium, 2018. This symposium, cosponsored by CHPR, provided an opportunity to learn how qualitative methods can be used to inform and advance health-related research. Expert panels and guest speakers presented throughout the day-long symposium, which also included a data coding workshop. The event was well attended with 131 participants from organizations and academic institutions throughout California.







2018

Qualitative Health Research Symposium

Evaluation Report | May 2018



SPONSORED BY

Betty Irene Moore School of Nursing
Clinical and Translational Science Center
Institute for Social Sciences
Center for Reducing Health Disparities
Latino Aging Research Resource Center
Center for Healthcare Policy and Research



Appendix A: Agenda

8:00-10:00 Workshop

Kathy Charmaz, PhD, CSU Sonoma

10:00-10:30 Symposium Registration

10:30-10:45 Welcome

Ted Wun, MD, FACP, UC Davis

Deborah Ward, PhD, RN, FAAN, UC Davis

10:45-12:00 Opening Keynote Address. Studying the Experience of Chronic Illness with

Grounded Theory Kathy Charmaz, PhD, CSU Sonoma

Abstract: Diverse health researchers have adopted grounded theory methods for their studies. But what is grounded theory? How does it shape the research process? This address (1) provides a brief introduction to grounded theory and places its evolution in a historical context, (2) focuses on both the grounded theory research process and subsequent conceptual products gained through studying the experience of illness, (3) shows how issues in grounded theory studies of health and illness illuminate more general tensions in qualitative research, and (4) describes constructing concepts such as loss of self, moral status of suffering, and liminal injustice. I conclude by offering advice about conducting qualitative research.

12:00-12:45 Lunch (provided)

12:45-1:45 Qualitative Research In-Practice

Surgeon Noticings of Additional Concerns: A Conversation Analysis

Anne White, PhD, UC Davis

<u>Abstract</u>: This analysis outlines specific dilemmas surgeons grapple with when sharing new noticings of additional concerns with patients during office visits. Noticings were found to be predominately framed as "dispreferred turns-at-talk," similar to other medical bad news tellings. The data are video-recorded medical encounters from a rural Texas clinic. In total, 281 visits were reviewed, spanning 95

patients. This analysis uses Conversation Analysis in order to further our understanding of doctor-patient communication.

Nurse Educators' Conceptualizations of & Pedagogical Approaches to Social Justice Claire Valderama-Wallace, RN, MSN, MPH, PhD Candidate, UC Davis

Abstract: This study examines how nurse educators perceive and approach social justice. Utilizing constructivist grounded theory methods, I interviewed twenty-eight participants. Nurses' conceptualizations of social justice included equity, equality, self-awareness, and action. Upbringing, education, institutional factors, and curricular opportunities influenced their understanding of and pedagogical approach toward social justice. This work bridges lines of inquiry about curricular gaps and experiences of marginalized faculty. These findings also challenge the common supplemental approach to diversity and inclusion

1:45-3:00 Using Qualitative Methods in Different Cultural Contexts to Understand Mental Health: Expert Panel Discussion

> Abstract: This panel discussion will focus on how qualitative methods have enriched our understanding of mental health issues in specific cultural contexts. The speakers' collective research spans the globe, from interventionist research supporting dementia caregivers in Vietnam, to exploration of varied health behaviors and perspectives among Latino immigrants in the U.S., to systems-level analysis of the politics of migration, mental health, and cultural translation in Italy.

Cristiana Giordano, PhD, UC Davis Migration, Mental Health and Cultural Translation in Italy

Xóchitl Castañeda, PhD, UC Berkeley

Health of Latino Immigrant Workers

Ladson Hinton, MD, UC Davis

Family Caregiving Intervention Development and Adaptation in Vietnam

Moderator: Samantha Blackburn, PhD, RN, CSU Sacramento

3:00-3:15

3:15-4:30 Closing Keynote Address. Emancipatory Science and Edge Runners: Messages on Social Policy and Nursing Carroll Estes, PhD, FAAN, UC San Francisco

Abstract: Social policy theory, research, and practice require attention to inequality,

power, and agency. Real world micro-, meso- and macro-level analyses provide a lens for nursing science. This is a historic time of mounting individual and collective precarity, manifesting in debate over The Right to Have Rights. Our standpoints include race, ethnicity, gender, class, sexualities, (dis)abilities, and immigrant and indigenous peoples, local to global. Structure and agency are implicated in our material and symbolic experiences of advantage and disadvantage that cumulate over our lifetimes and generations. Edge running in emancipatory science through critical theory, research and practice is our task. Advancing knowledge and realization of dignity, access, and equity is our mission.

4:30-5:30 Meet-and-Greet Open Reception

All attendees welcome

Appendix 6. CHPR Seminar Speakers

Appendix 6 Table 1. CHPR seminar speakers from 2017 - 2020.

Presenter	Title or Organization	Presentation	Year
Katherine Kim, PhD, MPH, MBA	Assistant Director, Betty Irene Moore School of Nursing, UC Davis	Outcomes of a Real-life Demonstration of Stakeholder Engagement in Patient-Centered and Comparative Effectiveness Research Design	2017
Anthony Wright	Executive Director, Health Access	Health Policy and Health Politics	201 <i>7</i>
Elizabeth David, MD, FACS	Associate Professor, Dept of Surgery, UC Davis	Survival benefits associated with surgery for advanced non-small cell lung cancer.	2017
Ethan Evans, PhD	QSCERT Fellow	Health Sociology in Health Services Research	2017
Mark Yarborough, PhD	Dean's Professor, Bioethics, UC Davis	Ethics in Health Services Research	2017
Ted Epperly, MD, FAAFP	President and Chief Executive Officer, The Family Medicine Residency of Idaho	Idaho's Journey in the Development of a Ten Year Strategic Plan for Healthcare Reform and Graduate Medical Education	2018
Patricia N E Roberson, PhD	Human Development & Family Studies	Love and marriage: Theoretical and empirical explanations for the marriage-health link	2018
Christopher Kim, MD, MPH	QSCERT-PC Fellow	Chronic School Absenteeism and Health	2018
Ronit Ridberg, PhD, MS	QSCERT - PC Fellow	Outcomes of a fruit and vegetable prescription program for participating households and children	2018
Patrick Romano, MD, MPH	Professor of Medicine and Pediatrics, UC Davis, Division of General Medicine	How to Get Your Paper Rejected (and Other Reflections of a Journal Editor)	2018
Seonwha Lee, PhD	QSCERT-PC Fellow	Marriage and Health over the Middle Years	2018
Veena Manja, MBBS, MS	Adjunct Assistant Professor, Department of Surgery, UC Davis	The Ecology of Clinical Decision Making	2018
Prabhu Shankar, MD, MS, MRCP (UK)	Clinical Informatician, Assistant Adjunct Professor, Public Health Sciences, UC Davis	Health Informatics in Health Services Research	2018
Diana Cassady, MPH, PhD	Associate Professor, Public Health Science, UC Davis	Policy Surveillance as Public Health Tool: An Example from Tobacco Control	2018
Su-Ting Li, MD, MPH	Associate Professor, Pediatrics, UC Davis	Knowledge Dissemination in Health Services Research	2018
Lisa Ikemoto, BA, JD, LLM	Professor of Law, UC Davis School of Law	Health Law in Health Services Research	2018

Peter Hilsenrath, PhD	Joseph M. Long Chair of Healthcare Management, Professor of Economics	Drug costs	2018
Michelle L Dossett, MD, PhD, MPH	Assistant Professor of Medicine, Massachusetts General Hospital and Harvard Medical School	Improving Health Outcomes Through Enhanced Patient-Clinician Relationships	2019
James Marcin, MD, MPH	Professor, Department of Politics, UC Davis	The use of Telemedicine in Emergency Departments to provide Pediatric Critical Care Consultations	2019
Caroline Giroux, MD, FRCPC	Assistant Clinical Professor, Department of Psychiatry and Behavioral Sciences, UC Davis	The application of trauma-informed principles while conducting research	2019
Nick Anderson, MS, PhD	Associate Professor, Public Health Sciences	Privacy, Ethics and Personalized Health	2019
Joshua Frost, MSPH (HP&M), PMP, CFE, CASP	Medicaid Program Integrity Specialist, Optum Government Solutions	Healthcare Fraud 101	2019
Valerie Gilchrist, MD	Chair of the Department of Family Medicine, University of Wisconsin	Curiosity + Passion + Skills = Research(er)	2019
Paul Leigh, PhD	Professor, Department of Public Health Sciences, UC Davis	Minimum Wages and Public Health: Natural experiments to test for effects of income on health	2019
Laurel Beckett, PhD	Distinguished Professor and Chief, Department of Public Health Sciences, UC Davis	The Trajectory of my Research and Collaborations in Cognitive Aging	2019
Diana Miglioretti, PhD	Dean's Professor of Biostatistics, UC Davis	Risk-stratified breast cancer screening to improve the balance of benefits and harms	2019
Anne White, PhD	QSCERT Fellow		2019
J Nwando Olayiwola, MD, MPH	Associate Physician, UC San Francisco, Family Community Medicine	Patient Engagement with eConsults: Lessons from a Mature Safety Net System	2019
Jessica Cox, MD	QSCERT Fellow	Routine ICU Admission for Monitoring Trauma Patients	2019
Logan Trenaman, PhD	Post-Doctoral Scholar, UC Davis		2019
Sarah Munro, PhD	Assistant Professor, Department of Obstetrics & Gynecology, University of British Columbia	Putting shared decision making into practice: Lessons from implementation research in Canada	2019
Angie Hood- Medland, MD	QSCERT Fellow	Medi-Cal Mailings: All Household vs. Targeted to Smokers	2019
Melanie Dove, MPH, ScD	QSCERT-PC Fellow	Are Tobacco 21 Policies Associated with Changes in Tobacco Prevalence among 18-20 year olds? A Multi-State Evaluation using BRFSS 2013-2017	2019
Sarah Kahle, PhD	QSCERT-PC Fellow	Using heart rate variability measures in research.	2019

Maria Catrina D Jaime PhD, MPH, CPH	QSCERT-PC Fellow	Perspectives on pregnancy, contraception, and abortion among young men involved in the juvenile justice system	2019
Professor Raoh- Fang (Jasmine) Pwu	Director, National Hepatitis C Program Office, Ministry of Health and Welfare Taiwan	Solutions to high drug costs: Lessons from Asia	2019
Fatima T Malik, MPH	School of Nursing, PhD Candidate, UC Davis, & Principal, Malik WCC	The Science of Science Communication: Informal Strategies for Public Engagement	2019
Kermit Jones, JD, MD	Internal Medicine Physician, Kaiser Permanente Medical Group	Prior Authorization: Political Lotions, Potions and Elixirs of the Healthcare system	2019
Miriam Nuno, PhD	Associate Professor, Dept., Public Health Sciences, UC Davis	Disparities in Neonatal Abstinence Syndrome in the United States: 2000-2016	2019
David Panush	President, California Health Policy Strategies, L.L.C.	An Exercise in the Art of Policy Trade-offs and Decision-Making	2019
Julianne Penner, MS	Computational and Data Science Research Specialist, UC Davis Health	Zero-Inflated Count Regression with Application to Lung Cancer Incidence	2019
John Cullinan, BASF, MA, MSc, PhD	Senior Lecturer in Economics, National University of Ireland, Galway	Population-based Mammography Screening, Socioeconomic Status and Breast Cancer Mortality— Evidence from a Natural Experiment in Ireland	2019
Ted Calvert, MS	Project Management Lead (Consultant), OSHPD Health Payments Data Program	Update on OSHPD's Healthcare Payments Data Program: An All Payer Claims Database for California	2019
Michael Valle, MA, MPA	Chief Strategy Officer & Branch Chief, Information Services at OSHPD	Update on OSHPD's Healthcare Payments Data Program: An All Payer Claims Database for California	2019
Susan Stewart, PhD	Adjunct Professor, Division of Biostats, Department of Public Health Sciences, UC Davis	Comparison of Record Linkage Software for De-duplicating Patient Identities in California's Prescription Drug Monitoring Program	2019
Lisceth Brazil- Cruz, PhD	UC Davis ADVANCE Social Sciences Research Initiative Postdoctoral Scholar	Chicana/o/x and Latina/o/x Health Care Issues	2019
Desiree Backman, DrPH, MS, RD	Director, Whole Health Solutions Program	The Green Prescription: Improving Population Health through Environmental Interventions	2019
Kathleen Clanon, MD	Medical Director, Alameda County Care Connect	Alameda County Social - Health Information Exchange	2020
Jeffrey Hoch, MA, PhD	Associate Director, CHPR, Professor, Department of Public Health Science, UC Davis	Negative findings in cost- effectiveness analysis of mental health interventions: How often, how wrong and how about an alternative	2020

Joshua Fenton, MD, MPH	Professor, Department of Family and Community Medicine, UC Davis	Trends and Outcomes of Dose Tapering Among Patients on Long- Term Opioid Therapy, 2008-2017	2020
Stephen Henry, MD, MSc	Assistant Professor, Internal Medicine, UC Davis	Results from a randomized trial of a clinician communication training intervention to improve processes and outcomes of care related to chronic pain in primary care	2020
Marj Plumb, MNA, DrPH	Non-Profit Consultant and Trainer, Public Policy Advocacy and Non-Profit Organizational & Leadership Development	How to Influence the California Legislative Process as a Researcher	2020
Laura Wherry, PhD	Assistant Professor In- Residence, General Internal Medicine and Health Services Research, UCLA	Medicaid and Mortality: New Evidence from Linked Survey and Administrative Data	2020
Renata Abrahão, MD, MSc, PhD	QSCERT Fellow	Chronic Medical Conditions and Late Effects Following Non-Hodgkin Lymphoma in HIV-1 Uninfected and HIV-infected Adolescents and Young Adults: A Population-Based Study	2020

Appendix 7. CHPR Facilities

Space

CHPR is located in the Grange Building at 2103 Stockton Boulevard adjacent to the UC Davis Medical Center Campus. CHPR originally occupied the 4,500 square feet located in the upstairs portion of this two-story building. Total office space is now 8,500 square feet following the 2012 addition of downstairs office space to meet CHPR's growing research needs. The space includes 10 offices, 35 workstations, and 2 conference rooms, 2 break rooms and restrooms per floor.

Computer/IT

CHPR computers are Microsoft Windows-based with supplemental fixes installed as they are released. All computers use Microsoft Office. All software on CHPR workstations is properly licensed to the individual systems. CHPR also maintains licenses for other software including STATA, SAS, Microsoft Visio, Microsoft Project, and Endnote. The security level to local and network computing resources is determined by UC Davis and UCDHS security policies and HIPAA guidelines. All workstations are protected through virus scan software. The policies and virus updates are managed by the Network Associates e-Policy Orchestrator Agent, provided and controlled by UCDHS-IS. This scheme is extremely effective against computer viruses and malicious code. Anti-spyware software is also installed on all computer workstations.

Access to any computer system in our network is regulated by secure login and password authentication. The hard drives of all computers at CHPR are protected by Private Key Full-Disk Encryption, rendering all data unreadable in the event the computer is accessed without permission or removed from CHPR. All network-based data are hosted, secured and backed up by a team of data-management professionals. Within the UCDMC Data Operations Center, a substantial amount of drive-storage space has been allocated to – and reserved exclusively for – secure use by CHPR personnel. While project data are stored on servers at the UCDHS Data Center, all of CHPR's software programs are physically installed on –and accessed from– local CHPR workstations. Network-stored data are maintained by a multi-level backup procedure, which includes off-site storage of archived data. Data files containing personal or sensitive information, including information on patients and/or study participants, are kept in secure "private" sections of the network drive accessible only to the file's creators and legitimate viewers. All network-stored data containing personally identifiable information are encrypted to current security standards.