

2024 Annual Report



Issue 3 January 2025

The Southern California Healthcare Delivery Science Center continued catalyzing health innovations in 2024. Highlights include:

- Launched HDS Certificate program
- Launched new cycles of DHS-USC Safety Net Innovation Awards and Seed Grants
- Obtained current priorities from both health system leaders and patient committees
- Hosted our second annual symposium with themes of health equity and cross-sector collaboration
- Created plain language summaries of past projects

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Contact us: hds@usc.edu

Certificate Program

We began enrolling students into our Healthcare Delivery Science training program, a multidisciplinary online series of asynchronous courses covering multiple topics. Students ranging from clinicians to public health students from any institution can receive digital badges for individual courses as well as a Certificate of Completion for finishing all courses. We began promoting it through road shows and will market it more broadly in 2025.



Grantee Progress Reports

The most recent SC CTSI Safety Net Innovation Awardees (SNIA) and HDS Center Seed Grantee made significant progress in 2024, in close collaboration with DHS partners.

Benjamin Xu, M.D., Ph.D., Department of Ophthalmology Keck School of Medicine of USC

Improving Outcomes of Glaucoma Suspects Identified by Teleretinal Screening in a Diabetic Safety-Net Patient Population (2022 SNIA)





Xu and team published specificity and sensitivity results of its artificial intelligence algorithm, which they trained on 12,098 images from 5,616 patients. Algorithm performance matched or exceeded that by ophthalmologists and optometrists. The team has partnered with DHS technology teams to implement the algorithm in screening workflows system-wide to provide more reproducible and timely glaucoma care.

Todd Schneberk, M.D., M.S., M.A., Department of Emergency Medicine Keck School of Medicine of USC

Hospital-Based Programs to Address Interpersonal Violence in Los Angeles County: Hybrid 2 Study to Evaluate Implementation and Effectiveness (2022 SNIA)



Schneberk presented initial evaluation results at the DESCIPHER symposium, sharing rates of patients referred, engaged, and enrolled in violence intervention programs; factors limiting enrollment; and a thematic analysis of program barriers and facilitators from both staff and patient perspectives (see inset). Following analysis of effectiveness outcomes, the team will discuss results with DHS leaders and disseminate findings nationally.

"[My HVIP case manager] was there to talk to me about all of these services that were available for me, and she was there to just overall hear me out. And I felt like, even though I wasn't really open to be committed to talking with [a therapist], I still felt very comfortable meeting up with her. She was very open with me, and I was open with her for that reason as well. She just overall made me feel safe."

Emily Johnson, M.D., M.P.H., Department of Emergency Medicine Keck School of Medicine of USC

Emergency Department-based Mobile Phone Distribution as a Mechanism to Reduce Barriers to Healthcare and Social Services (2023 Seed Grantee)



Johnson and team completed a qualitative study on a cell phone distribution program with the DHS Emergency Department. Interviews with ten physicians, residents, nurses, and social workers indicated that, although providers see the value of the program in increasing healthcare access, staff members' concerns about workload and logistics need to be addressed for the program to be successful.

New Safety Net Innovation Awardees

The Center is supporting four new \$125,000 SC CTSI Safety Net Innovation Awards to support implementation, evaluation and dissemination over two years. Past awards are <u>listed on our website</u>, including outcomes where available.

Jennifer Tsui, Ph.D., M.P.H., Population and Public Health Sciences, KSOM In collaboration with LA County DHS Cancer Navigation Program

Evaluation of the DHS Cancer Navigation Program to Inform Scale-up and Long-term Sustainability



DHS launched a system-wide Cancer Navigation Program in 2022 to improve cancer care access, quality, and equity for DHS patients. Focusing on timeliness to treatment, guideline-directed care, and overall care utilization, this project will evaluate the program and contribute to our understanding of effective strategies for oncology navigation.

David Dadiomov, Pharm.D., Titus Family Department of Clinical Pharmacy, Mann In collaboration with LA County DHS Addiction Medicine and Pain Workgroup

Transformative Chronic Pain Management for Sickle Cell Anemia Patients: A Multidimensional Approach



To improve quality of care in pain management, this team is implementing an evidence-based modality (buprenorphine) as a safer but under-utilized alternative to full-agonist opioids in treating acute and chronic pain in sickle cell anemia.

Charite Ricker, M.S., C.G.C., Medicine, KSOM In collaboration with LA County DHS Genetics and Genomics Workgroup

Increasing Equitable Access to Genetic Cancer Risk Assessment in DHS Through Enhanced Family Cancer History Capture



Expanding on the success of a cancer screening program in place at one DHS site, this team is developing an EHR-based tool to efficiently capture personal and family cancer history. Overall, they aim to improve cancer risk assessment and early intervention among underrepresented communities. Initial target areas are Lynch syndrome and BRCA1 and BRCA2-associated hereditary breast and ovarian cancer syndrome.

Stacey Dusing, P.T., Ph.D., Biokinesiology and Physical Therapy, Ostrow In collaboration with LA County DHS Specialty Care

Provider Education and DHS Implementation of Early Identification and Intervention for Infants



This project is standardizing practices across DHS sites for early identification and intervention for children with Cerebral Palsy and other developmental disabilities. It will achieve this by providing evidence-based education to primary care providers, streamlining workflows, and increasing ACE screening and referrals to appropriate support programs.

New Seed Grant

We funded our second seed grant, an internal award designed to catalyze innovations through smaller-scale projects. Solicitations for new applications occur in two annual cycles.

Emily Johnson, M.D., M.P.H., Department of Emergency Medicine Keck School of Medicine of USC

Alcohol Withdrawal can be Safer at Home: A mixed-methods evaluation of homebased treatment for alcohol withdrawal and alcohol use disorder



Alcohol use can cause problems for patients and the people in their lives. In the Emergency Department (ED), we often see patients who feel sick and shaky when they stop drinking, a problem called alcohol withdrawal. These patients are often admitted to the hospital for medication, but many are discharged quickly and most don't get connected to additional help or medications to help them drink less or stop drinking. We plan to start a program that would allow patients with alcohol withdrawal to be treated with medication in the ED and then at home. The patients would get medicine to take and get checked on by a nurse every day with phone visits. When they are feeling better, the patients would have a chance to talk with an addiction specialist for help with medication or other programs to cut back or stop drinking. We hope to learn if it would be helpful to treat patients from home and if this could help the hospital function better. We hope to learn how patients feel about home treatment and if patients can follow up with addiction medicine services. This will help us learn if we should expand this program to other hospitals.

SEED GRANT OPPORTUNITY

LOIs due 2/28/2025

Grant Overview: The Southern California Healthcare Delivery Science Center is interested in supporting the design, implementation, and evaluation of innovations in care delivery. Innovations typically take the form of system-wide changes to workflows and new standards of patient care.

Focus Areas: Improvements in access, quality, efficiency, patient-centeredness, and equity in care delivery.

Goal: To drive sustainable innovations that improve healthcare outcomes for patients, practitioners, and the healthcare system.

Current Priorities

We continued our process for obtaining priority areas for research from patients throughout DHS, as well as DHS leaders. The priorities are published annually on our website and used in funding announcements.



For patient priorities, we visit patient and family advisory councils quarterly and facilitate brainstorming topics that are high priority for being addressed. The groups vote on their top priorities. This annual process has been completed with three groups to date.

Harbor UCLA Medical Center Patient and Family Priorities

- Patient portal engagement
- Patient and staff education on patient empowerment and rights
- Customer service: spending time to explain diagnoses and treatments

Los Angeles General Medical Center Patient and Family Priorities

- Patient portal engagement
- Reducing use of restraints in psychiatric unit
- Navigating services at LA General and throughout DHS
- Women's health: addressing disparities in screening and routine care
- Self-management for disabling anxiety

Rancho Los Amigos National Rehabilitation Center Patient Priorities

- Access to primary care
- Access to specialty care
- Vascular risk factor control for individuals with disabilities and chronic conditions

For DHS priorities, we solicit topics from leadership as a step in our funding cycle preparation.

DHS Priorities

- Radiology, especially reducing low yield studies and improving efficiency
- Perioperative services, especially surgical throughput
- Use of informatics to improve clinical care and the quality of clinician work
- Make clinical documentation meaningful to all users and stakeholders
- Specialty care medical homes for chronic disease

DESCIPHER 2024 Symposium

We held our second annual "Healthcare <u>Delivery Science</u>: <u>Innovation and Partnerships for Health Equity Research</u> (DESCIPHER)" Symposium on October 28, 2024, at the California Endowment. More than 110 participants attended, including community members, students, frontline clinical care providers, quality consultants, operational leaders, and healthcare delivery scientists. Community members served on patient/advocate speaker panels, sharing their prior experiences with the healthcare system. Two new session types this year were 1) a poster session with 14 presenters and 2) interactive educational break-outs with experts in implementation, evaluation, grant writing, and journalism.

Theme: Bridging the Gaps to Health Equity Through Cross-Sector Partnerships



Symposium recordings

Keynote Speaker

Successes and Challenges in Policy Efforts to Address the Determinants of Health and Achieve Equity



Michael Cousineau, DrPH Professor Emeritus, Department of Population and Public Health Science

Population and Public Health Sciences, Keck School of Medicine at the University of Southern California





DESCIPHER 2024 Symposium (cont'd)

Community-Engaged Healthcare Delivery Interventions Panel



Reba Stevens | Patient Advocate



Erin Saleeby, M.D., M.P.H. | Director of Women's Health Programs & Innovation, LA County DHS | Associate Professor of Obstetrics and Gynecology, UCLA



Diamond Lee, M.S.W. | Director, Birth Equity and Community Collaboration, LA County DHS



Todd Schneberk, M.D., M.S., M.A. | Director of Population Health and Social Emergency Medicine, LA General Medical Center | Assistant Professor of Clinical Emergency Medicine, USC



Clemens Hong, M.D., M.P.H. | Director of Community Programs, LA County DHS

Healthcare System Interventions Panel



Barrisford Bladon, M.A. | Patient Advocate



Thomas Valente, Ph.D. | Professor, Health Behavior Research Division, USC



Michael Kanter, M.D., C.P.P.S. | Professor, Departments of Health System Science and Clinical Science, Kaiser Permanente School of Medicine



Charmaine Dorsey, M.S.W., L.C.S.W. | Chief Wellness Officer, LA County DHS



Steven Fox, M.D., M.Phil. | Professor and Associate Director of the USC Titus Center for Population Health and Medication Safety, USC

Educational Breakout Sessions

Implementing Programs Across Large **Systems**



Evan Raff, M.D., M.H.A. | Director of Specialty Care, LA County DHS | Assistant Professor of Radiology, UCLA



Reaching Ordinary People: Practical Tips for **Telling Your Story**



Michelle Levander | Director USC Center for Health Journalism, Annenberg School for Communication and Journalism, USC

Writing Grants for Community Engaged Health Services Research



Barbara Turner, M.D., M.S.E.D., M.A., M.A.C.P. | Professor of Clinical Medicine, Senior Advisor, Gehr Family Center for Health Systems Science, USC



Evaluating Interventions

Breena Taira, M.D., M.P.H. | Director of Social Medicine, Olive View-UCLA Medical Center | Associate Professor of Clinical Emergency Medicine, UCLA

Abstracts

Posters from USC, UCLA, DHS, DPH, SDSU



Winning Oral Abstract: Leveraging a County Health System and University Partnership to Promote and Improve the Distribution and Use of Local Food Resources to Address Food Insecurity Fatinah Darwish-Elsherbiny, M.P.H., R.D.N. | Senior Program Manager, Nutrition and Physical Activity Program, LA County Department of Public Health

Learning Collaborative Efforts

Seminars

In collaboration with the Gehr Family Center for Health Systems Science and Innovation, we continued hosting virtual seminars on Healthcare Delivery Science. The seminar is open to all faculty, staff, and students with interests in health system innovation, as well as scholars outside of USC. As in prior years, we invited past Safety Net Innovation Awardees to present their work.

- April 22, 2024 Mama's Neighborhood, Erin Saleeby, M.D., M.P.H.
- June 24, 2024 Hospital Based Violence Intervention Programming in the LA Safety-Net Healthcare System: Implementation Lessons and Qualitative Results, Todd Schneberk, M.D., M.S., M.A.
- Sept. 23, 2024 Harnessing AI to Enhance the Delivery of Glaucoma Care, Benjamin Xu, M.D., Ph.D.

National Forum

We continue to co-lead a national CTSA Discussion Forum on Public-Academic Partnerships with fifteen other CTSA hubs who also partner with city, county, or state health departments. We are submitting a manuscript on how we leveraged partnerships during the pandemic and the ways the partnerships have changed since the pandemic.

Dissemination

We continue to pursue several dissemination strategies for successful interventions. In addition to past awardees publishing and presenting their CTSI-funded research through academic channels, we have created summaries for patients and health system staff, aka "Innovation Briefs." We shared two of these with DHS Patient and Family Advisory Councils and incorporated their feedback in subsequent versions, which will be posted to our website soon. (See example on p. 10.)

Our website is also a vehicle for sharing other resources including symposium videos, seminar recordings, grant opportunities, etc.

This year we created a LinkedIn group to foster connections by creating ongoing relations among healthcare executives, physicians, researchers, academics and clinical trial professionals. The growing "Healthcare Delivery Science" group provides a collaborative environment for the sharing of insights, best practices, and innovative ideas for healthcare improvement.

Consultation Services

Researchers interested in conducting HDS research are welcome to request consultations on topics such as:

- How to engage operational leaders at Los Angeles County Department of Health Services in research design and implementation
- The process for conducting research with the county
- Training and career development in Healthcare Delivery Science

Dr. Towfighi provides over 20 expert consultations annually.

In 2025 we will formalize a referral process that incorporates our extensive pool of mentors.

Innovation Brief Example







FLuid ASPiration (FLASP) Clinic

A new study shows that a clinic can reduce ER visits and improve the healthcare experience for people with liver disease

WHAT WAS THE ISSUE?

- People with liver problems can get fluid in their bellies which is uncomfortable
- When lowering salt and medications don't work, they need a procedure to drain fluid
- Since they can't make an appointment, they have to go to the ER, which is crowded and has long waits



WHAT WERE THE QUESTIONS?

- 1. Can a clinic replace the ER for these procedures?
- 2. Is it safe?
- 3. How does it affect the ER?
- 4. What do the patients think of it?



WHAT DID THE STUDY FIND?

Convenience



Monthly ER Visits



14 months, 2685 procedures



WHY IS IT IMPORTANT?

Less crowded ERs Happier patients





The study was done by doctors from Los Angeles General Medical Center and Keck School of Medicine of University of Southern California.

For more information, please scan the QR code.



Future Goals

- 1. Train 100 HDS professionals in certificate program
- 2. Offer Master's Degree in Healthcare Delivery Science
- 3. Fund 12-15 projects with seed grants
- 4. Host popular annual symposium
- 5. Become self-sustaining

Timeline

Year 1	Year 2	Year 3	Year 4	Year 5
Advisory Board				
Yearly Symposium				
Quarterly Seminar Series				
Training Program	Certificate Pro	gram (15 units) Masters in HDS		
Grant Applications/ Grant Management Team				
	Pilot Funding Program			
		Mentoring/Consultation Services		



About Us

HISTORY

The Center was created in July 2021 with financial support from the Keck School of Medicine of USC and the Southern California Clinical and Translational Science Institute, in addition to in-kind support from the Los Angeles County Department of Health Services.

MISSION

To enhance healthcare access, quality of care, and health outcomes to achieve health equity.

We achieve our mission by using innovative solutions to transform healthcare delivery and by leveraging academic-public sector partnerships.

OBJECTIVES

- Assemble and support teams to develop, demonstrate and disseminate innovative interventions for safety-net health systems.
- Develop a skilled workforce in the multidisciplinary field of healthcare delivery science, especially those who are underrepresented in medicine.
- Advance the science of healthcare delivery science to tackle health equity challenges.



PERSONNEL



Amytis Towfighi, M.D. Founding Director



Allison Orechwa, Ph.D., M.B.A. Managing Director



Lisa Thai, M.P.H.
Program Administrator



Nisa Lam
Program Specialist



Monica Girgis, M.P.H. Administrative Assistant

Advisory Board

We thank our diverse advisory board for opening doors, extending our reach, and helping shape our annual symposia.

Newly Added Member



Dong Chang, MDMedical Director, Critical Care Sciences, LA
General Medical Center

Continuing Members

Brian S. Mittman, PhD

Senior Scientist, Kaiser Permanente Research and Evaluation

Michael Kanter, MD, CPPS

Chair of Clinical Science, Kaiser Permanente Bernard J Tyson School of Medicine

Cyrus Shahabi, PhD

Professor of Engineering and Computer Science, USC Viterbi School of Engineering

Elisa Dominguez, MBA

Vice President of Qualitative and Multicultural Insights, Firefish

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Director, Eye Health, LAC DHS

Michael Gould, MD, MS

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Paul Giboney, MD

Associate Chief Medical Officer, LAC DHS

Linda S. Williams, MD

Core Investigator, Veterans Affairs HSR&D Center for Health Information and Communication

Steven Chen, PharmD

Chair in Community Pharmacy and Professor, USC Alfred E Mann School of Pharmacy

Bernadette Boden-Albala, MPH, DrPH

Director and Founding Dean, Program in Public Health, UC Irvine

Jerry Abraham, MD, MPH, CMQ

President, Los Angeles County Medical Association

David Atkins, MD, MPH, MSHS

Director of Health Services Research and Development, Veterans Affairs

Leslie Martinez, DNP, MSN

Assistant Nursing Director of Administration, Quality Improvement, LA General Medical Center

Shinyi Wu, PhD

Associate Professor of Social Work and Industrial & Systems Engineering, USC

Tony Kuo, MD, MSHS

Director, Office of Senior Health, County of Los Angeles

Evan Raff, MD

Director, Specialty Care, LAC DHS

Jehni Robinson, MD

President, USC Care Medical Group & Professor and Chair of Family Medicine, Keck School of Medicine of USC

Matt Holman, MBA, MPH

Partner, Camber Collective LLC

Jennifer Tsui, PhD, MPH

Associate Professor, Population and Public Health Sciences, Keck School of Medicine of USC

Jason Doctor, PhD

Chair and Professor of Health Policy and Management, USC Sol Price School of Public Policy

Arleen Brown, MD, PhD

Professor of General Internal Medicine and Health Services Research, UCLA

Tracey Veal

CEO, Healthy Equity Consultants

Thomas A. Buchanan, MD

Vice Dean for Research, Keck School of Medicine of USC

Lilyana Amezcua, MD, MS

Associate Professor of Clinical Neurology, Keck School of Medicine of USC

Sheila Murphy, PhD

Professor of Communication, USC Annenberg School for Communication and Journalism

Michele D. Kipke, PhD

Associate Vice President for Strategic Health Initiatives, USC

Erin Saleeby, MD

Director, Women's Health, LAC DHS

Bruce Ovbiagele, MD, MSc, MAS, MBA

Associate Dean, UC San Francisco & Chief of Staff, San Francisco Veterans Health Care System

Hal F. Yee, MD, PhD

Professor Emeritus, UCSF

Steven Fox, MD, MPhil

Assistant Professor of Pharmaceutical and Health Economics, USC Alfred Man School of Pharmacy

Ellis Meng, PhD

Chair for Convergent Biosciences and Professor, USC Viterbi School of Engineering

Sonali Saluja, MD, MPH

Medical Director and Vice President of Population Health, Healthcare in Action

Mentor Pool

We are fortunate that over 20 experts have agreed to serve as mentors for Healthcare Delivery Science projects. They represent operational leaders across Los Angeles County Department of Health Services, Department of Public Health, five different schools at USC, and other leading research organizations. Mentors are open to meeting with investigators with ideas for disruptive innovation.



Hal Yee, MD, PhD
Chief Medical Officer and Chief Deputy
Director, Clinical Affairs, LAC DHS



Anshu Abhat, MD
Director, Care Transitions, LAC DHS



Paul Giboney, MD
Associate Chief Medical Officer, LAC DHS



Allison Luu, MD
Patient Safety Officer, LA General Medical
Center



Evan Raff, MD
Director, Specialty Care, LAC DHS



Brad Spellberg, MD
Chief Medical Officer, LA General Medical
Center



Lauren Daskivich, MD
Director, Eye Health, LAC DHS



Anish Mahajan, MD
Chief Deputy Director, LAC Department of Public
Health



Erin Saleeby, MD
Director, Women's Health, LAC DHS



Phillip Gruber, MD
Interim Chief Medical Information Officer,
LAC-DHS



Amy Towfighi, MD
Director, Neurological Services, LAC DHS



Chase Coffey, MD
Associate Chief Medical Officer and Chief
Quality Officer, LA General Medical Center



Neil Bahroos, MBA
Clinical Research Informatics Officer,
KSOM and Keck Medicine of USC



Sarah Axeen, PhD
Director of Data and Analytics, USC
Schaeffer Center

Mentor Pool



Dong Chang, MD
Associate Medical Director, Critical Care
Services, LA General Medical Center
(Former Safety Net Innovation Awardee)



Steven Chen, PharmD, FASHP, FCSHP, FNAP
Professor of Clinical Pharmacy, USC



Albert Farias, PhD, MPH
Assistant Professor of Population and
Public Health Sciences, USC



Brian Mittman, PhD
Senior Scientist, Division of Health
Services Research and Implementation
Science, Kaiser Permanente



Barbara Turner, MD, MSED, MACP Professor of Clinical Medicine, USC



Jason Doctor, PhD
Professor of Public Policy, USC



Shinyi Wu, PhD Associate Professor of Social Work and Industrial & Systems Engineering, USC



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