



2023 Annual Report

Issue 2

January 2024

The Southern California Healthcare Delivery Science Center continued catalyzing health innovations in 2023. Highlights include:

- Hosted an inaugural national symposium on Healthcare Delivery Science with a theme of health equity
- Obtained current priorities from both health system leaders and patient committees
- Funded our first seed grant
- Launched new cycle of DHS-USC Safety Net Innovation Award
- Completed courses for HDS Certification program and prepared for launch.

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Awarded Seed Grant

We funded our first seed grant, an internal award designed to catalyze innovations through smaller-scale projects. We awarded a multidisciplinary team led by Emily Johnson, an emergency medicine physician, to adapt an intervention for the DHS Emergency Department that increases access to healthcare and social services through a federally funded cell phone distribution program.

2023 HDS Seed Grant Award

The Southern California Healthcare Delivery Science Center (SC HDS Center) and Los Angeles County Department of Health Services (LAC DHS) are interested in supporting the design, implementation and evaluation of innovations in care delivery at LAC DHS. Grants should catalyze new projects or supplement existing projects that advance our understanding of healthcare delivery innovations and their impact on patients, practitioners, and healthcare systems.

<p>LAC DHS Priority Areas</p> <ul style="list-style-type: none">• Increase access to care• Reduce unnecessary and potentially harmful diagnostic studies and treatment• Facilitate publicly reported metrics	<p>PI must be a USC faculty member</p>
<p>For more information, click link below: HDS Seed Grant</p>	<p>GRANT OF UP TO \$30,000 FOR UP TO 2 YEARS</p>
	<p>DEADLINE: MAY 22, 2023 5:00 PM PST</p>

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 health care and social services

While digital tools have expanded in recent years, so has the digital divide. Although low-income individuals have access to mobile phones and plans through the California Lifeline Program, many do not use these services. DHS offers limited access to California Lifeline through phone vendors located at the medical centers during business hours. Johnson et al are developing a model for broadening access to California Lifeline. They have partnered with Smart Choice Agency, a third-party vendor who acts as an interface between patients and California Lifeline. Smart Choice has a track record of partnering with skilled nursing facilities and shelters to distribute phones to patients. Smart Choice will place bilingual (English and Spanish-speaking representative(s) at DHS sites using the California Lifeline hours of operation as a guide (6am-9pm, 7 days a week). The representative meets the patient at the bedside, obtains approval, and activates and distributes the phone to the patient. Johnson's team will evaluate the approach for implementation of a phone distribution program using structured interviews of stakeholders at the three DHS Emergency Departments. If effective, roll out can then be expanded outside of the Emergency Department to include inpatient and clinic areas.

Progress Reports: Active Awardees

In collaboration with SC CTSI and DHS, the Center is supporting two \$150k Safety Net Innovation Awards to support implementation, evaluation and dissemination over two years. Progress from the two active awards is described below. Past awards are [listed on our website](#), including outcomes where available.

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)

This project is leveraging the existing teleretinal screening program across the DHS safety-net system to identify patients at high risk for glaucoma who need urgent evaluation. They are developing and validating artificial intelligence (AI) algorithms to risk stratify patients for glaucoma based on automated analysis of photographs. They will then develop a multimodal AI algorithm to detect urgent glaucoma referrals based on risk factors selected to optimize resource utilization. Subsequently, they will establish the effectiveness of implementing real-time glaucoma risk-stratification at LAC DHS sites through improvements in urgency and time-to-evaluation metrics. To date, the research team has completed Aims 1 and 2-- Development of AI algorithm to detect referable glaucoma, and Assembly of multimodal dataset to develop multimodal AI algorithm. Aim 3, Implementation of AI algorithms, began in Fall 2023. Manuscripts are in progress.

Todd Schneberk, MD, MS, MA, 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)

This project is employing a Hybrid 2 Effectiveness Implementation Design to evaluate the three Hospital-based Violence Intervention Programs (HVIP) across DHS. HVIPs identify hospitalized patients who are victims of interpersonal violence and provide a longitudinal, 6-month outpatient intervention that links patients to diverse, relevant outpatient services addressing social determinants of health and offers care coordination and support. The project is evaluating HVIP implementation processes using RE-AIM to structure analyzing key informant interview and administrative data that will inform developing and testing strategies to address identified challenges. In Year 1, the study team established baseline patient population characteristics and have made significant progress on key informant interviews. Year 2 milestones include sharing qualitative analysis results with programs for improvement, acquiring endpoint data and comparing it to 2019 baseline, and publishing findings to the scientific community.

Open Funding Opportunity

University of Southern California • Children's Hospital Los Angeles



Southern California
Healthcare Delivery Science Center
Innovation and Partnerships for Health Equity Research

2024 USC-DHS Safety Net Innovation Award

The Southern California Clinical and Translational Science Institute (SC CTSI) and the Los Angeles County Department of Health Services (LAC DHS) are partnering to develop and test interventions to enhance quality, patient-centeredness and outcomes of care provided at the LAC DHS.

Assemble a team to implement and/or evaluate interventions within DHS that will achieve the goals of quality, improved health, and patient-centered care. Priority will be given to projects that are designated by DHS personnel and/or patient groups as high priority.

**GRANTS OF UP TO \$125,000
OVER 2 YEARS**

**LOI DEADLINE: JANUARY 18, 2024
5:00 PM PST**

For more information, click link below:
[2024 USC-DHS Safety Net Innovation Award](#)

Current Priorities



We initiated a 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 (PFACs) quarterly and facilitate brainstorming topics that are high priority for being addressed. The PFACs then vote on their top priorities. This annual process has been completed with two PFACs to date.

Rancho Los Amigos National Rehabilitation Center Patient Priorities

- Access to primary care
- Vascular risk factor control for individuals with disabilities (including diabetes, diet, physical activity, nutrition, insulin resistance)
- Access to specialty care

Los Angeles General Medical Center Patient Priorities

- Patient portal engagement
- Reducing use of restraints in psychiatric unit
- Understanding which services are available at LA General and throughout DHS
- Women's health (addressing disparities in screening, routine care)
- Anxiety – navigating the world and self-management techniques to address anxiety that can be disabling

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



Inaugural Symposium

We held our inaugural Annual Symposium, “Healthcare Delivery Science: Innovation and Partnerships for Health Equity Research Symposium (DESCIPHER),” on June 29, 2023 at the California Endowment. The more than 80 attendees included community members, students (medical, public health), frontline clinical care providers, quality consultants, operational leaders, and healthcare delivery scientists. Community members served on patient panels, sharing their prior experiences with the safety net healthcare system and healthcare delivery science research.

THEMES

Models for Translating Evidence-based Interventions into Practice

Multi-Stakeholder Engagement and Team Science

Social Determinants of Health and Health Equity

Disruptive Innovations to Enhance Healthcare

Keynote Speaker

Disruptive Innovation in Healthcare Delivery:
A How to Guide



Hal Yee, MD, PhD

Chief Deputy Director, Clinical Affairs
Los Angeles County Department of Health Services



[Symposium website](#)

Certificate Program

We completed recording of the final courses in our Healthcare Delivery Science training program, a multidisciplinary online series of 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.

Launching soon! Please spread the word.



HDS CERTIFICATE PROGRAM

The center developed online courses on the emerging, multidisciplinary field of healthcare delivery science. Through a series of asynchronous lectures, developed in partnership with the SC CTSI Education Resource Center, participants will learn about the following topics:

- Introduction to Healthcare Delivery Science
- Research Methods
- Dissemination & Implementation Science
- Quality Improvement
- Health Systems Engineering
- Behavioral Economics
- Leadership & Management
- Multi-Stakeholder Engagement

Cost:

Certificate Program for Professionals
\$659

Certificate Program for Students
\$429

Individual Courses
\$35 to \$160



Other Progress

Hosted 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. Our second year of seminars focused on presentations by a past awardee and Dr. Towfighi.

- June 26, 2023 - **Implementing Telemedicine Group Visits for Chronic Migraine in a Safety Net Health System**, Elizabeth Joe
- October 23, 2023 - **Cardiovascular Risk Control Interventions to Address Inequities**, Amytis Towfighi

Led a 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. The group is currently collaborating on a manuscript on how we leveraged partnerships during the pandemic and the ways the partnerships have changed since the pandemic.

Supporting Dissemination

Currently, we are beginning to focus on providing a practical model/framework on how to scale effective interventions. We aim to help awardees go beyond scientific manuscripts in their results dissemination and equip them with skills and tools to translate their work into plain language that can be actionable.

We also plan to begin engaging DHS primary and specialty care workgroups to share project findings, spark new project ideas, and hear feedback on our work.

One avenue for dissemination will be a repository of evidence-based interventions (currently under development for our website with the support of student interns).

Offered Consultation Services

Researchers interested in conducting Healthcare Delivery Science 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

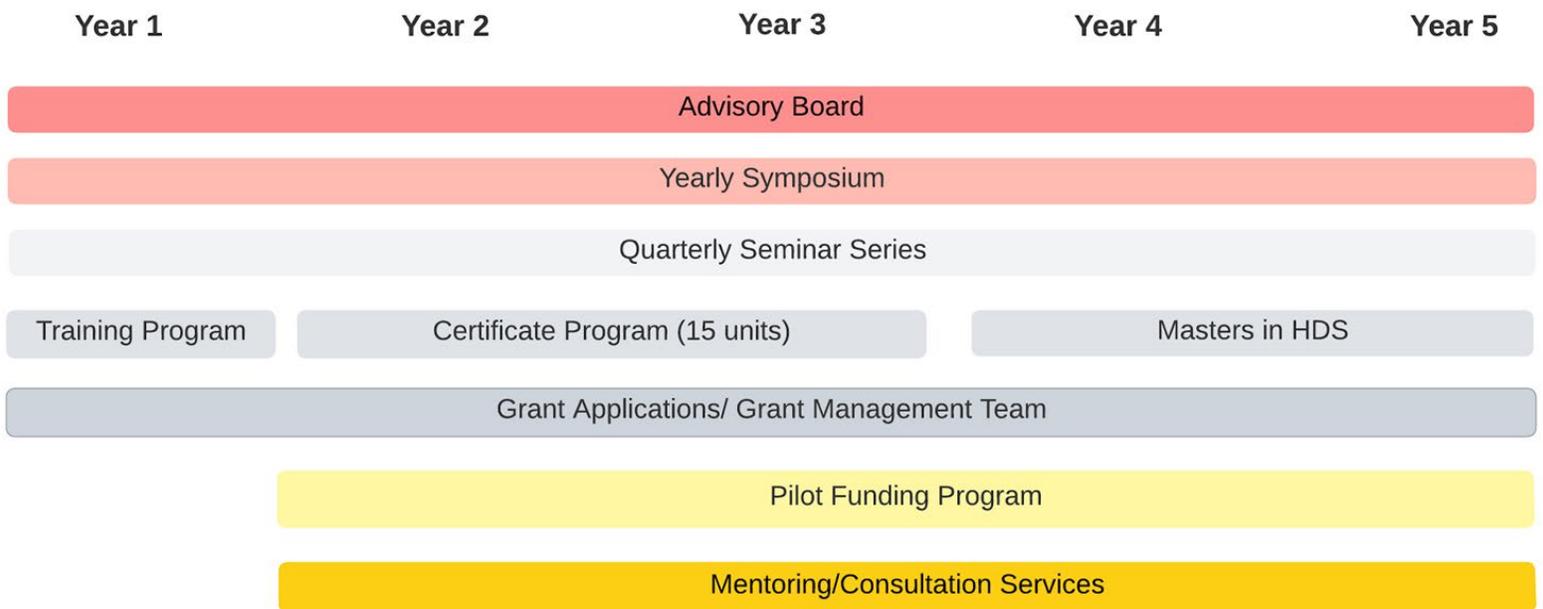
Dr. Towfighi has provided 76 expert consultations since launch.



Future Goals

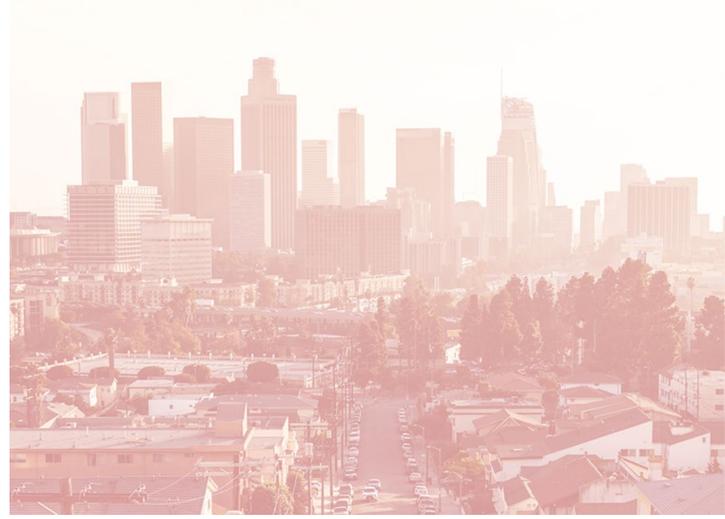
1. Train 100 HDS professionals in certificate program
2. Offer Master's Degree in Healthcare Delivery Science
3. Fund 12-15 projects with seed grants
4. Host popular annual symposium
5. Become self-sustaining

Timeline





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, MD
Founding Director



Allison Orechwa, PhD, MBA
Managing Director



Lisa Thai, MPH
Program Administrator



Nisa Lam
Program Specialist

Advisory Board

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



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



Evan Raff, MD
Director, Specialty Care, LAC DHS



Lauren Daskivich, MD
Director, Eye Health, LAC DHS



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



Paul Giboney, MD
Associate Chief Medical Officer, LAC DHS



Tony Kuo, MD, MSHS
Director of the Office of Senior Health for the
County of Los Angeles



Leslie Martinez, DNP, MSN
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Director of Health Services Research and
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Steven Fox, MD, MPhil
Assistant Professor of Pharmaceutical and Health
Economics, USC Alfred Man School of Pharmacy



Elisa Dominguez, MBA
Vice President of Qualitative and Multicultural
Insights, Firefish

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



Paul Giboney, MD
Associate Chief Medical Officer, LAC DHS



Evan Raff, MD
Director, Specialty Care, LAC DHS



Lauren Daskivich, MD
Director, Eye Health, LAC DHS



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



Amy Towfighi, MD
Director, Neurological Services, LAC DHS



Anshu Abhat, MD
Director, Care Transitions, LAC DHS



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



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



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



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

Mentor Pool



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



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Brian Mittman, PhD
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**Barbara Turner, MD, MSED,
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