

Update on Health Equity Activities

Division of Laboratory Systems

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Spring 2023 CLIAC Meeting
April 13, 2023



STRATEGIC FRAMEWORK

The Centers for Disease Control and Prevention's (CDC) Division of Laboratory Systems (DLS) works to advance quality and safety systems, informatics and data science, and training and workforce development.

MISSION

Improve public health, patient outcomes, and health equity by advancing laboratory systems

VISION

Exemplary laboratory practice and systems strengthen clinical care, public health, emergency response, and health equity

GUIDING PRINCIPLES

Our core values guide all we do in DLS.

ORGANIZATIONAL EXCELLENCE

Cultivate an equitable, inclusive, and accessible environment that fosters a diverse, innovative, result-driven, and collaborative workforce

PARTNERSHIPS

Foster public and private partnerships to strengthen the role of laboratory practice in clinical care, public health, and emergency response

SCIENTIFIC EXCELLENCE

Promote scientific quality and integrity of laboratory standards, practice, innovation, and evaluation to improve the public's health

COMMUNICATION

Deliver timely, actionable messages using plain language, inclusive principles, and appropriate communication channels

HEALTH EQUITY

Apply health equity principles in all DLS activities

GOALS

Quality and Safety

Improve the quality and safety of clinical and public health testing and practice

- Advance the integration of laboratory expertise in healthcare systems to improve diagnoses
- Generate and increase the use of adaptive quality management systems that support next generation sequencing workflows
- Advance the development and use of standards, guidelines, and regulations to improve the quality of laboratory testing
- Lead the implementation of biorisk management system standards for the safety of laboratory and testing professionals and their communities

Data Exchange and Analytics

Improve the exchange and use of clinical laboratory testing data

- Modernize the public health informatics infrastructure for the testing community to improve the timely exchange of clinical laboratory data
- Advance the quality and interoperability of clinical laboratory data through the development and use of standards
- Conduct studies that use data from or about the clinical and public health testing community

Training and Workforce Development

Reach, train, and sustain clinical and public health laboratory professionals and the testing community

- Develop an ongoing learning community that strengthens links between clinical laboratories, public health laboratories, and CDC
- Increase the extent to which training and workforce development resources are accessible and responsive to the evolving needs of laboratory professionals
- Improve the capacity of public health and clinical laboratories to sustain their own training and workforce development programs
- Develop a community of practice to connect testers in non-laboratory settings to CDC and to each other, provide training resources tailored to testers' needs, and empower them to train each other

CDC Biorepository

Expand access by preserving sample quality and enhancing collection and data standards

- Lead and promote a culture of excellence and continuous quality improvement for the CDC biorepository
- Improve the development, integration, and visibility of biorepository safety and operation standards to minimize risks to the workforce and samples
- Enhance services and tools that address the critical need for sample management across CDC
- Develop an infrastructure and implement sample sharing for CDC programs

Preparedness and Response

Enhance the preparedness and response capabilities and capacities of the clinical and public health testing community

- Engage in new partnership opportunities to enhance response capabilities for public health emergencies and surveillance for emerging threats
- Improve communications and reach for continual engagement with the testing community
- Identify testing facilities and implement mechanisms to enhance surge capacity
- Increase the availability of resources and develop materials for testing facilities to respond to public health threats

CDC's CORE Commitment to Equity

CDC launched an agency-wide strategy to integrate equity into the fabric of all we do



Cultivate comprehensive health equity science

- CDC embeds health equity principles in the design, implementation, and evaluation of its research, data, surveillance, and intervention strategies



Optimize interventions

- CDC uses scientific, innovative, and data-driven strategies that address environmental, place-based, occupational, policy and systemic factors that impact health outcomes and address drivers of health disparities



Reinforce and expand robust partnerships

- CDC seeks out and strengthens sustainable multi-level, multi-sectoral and community partnerships to advance health equity



Enhance capacity and workplace diversity, inclusion, and engagement

- CDC builds internal capacity to cultivate a multi-disciplinary workforce and more inclusive climates, policies, and practices for broader public health impact

DLS Health Equity CORE Goals

Informatics and Data Science Branch

By December 2025, 30% of newly established electronic test orders and results (ETOR) systems will be between public health laboratories and healthcare providers/systems/centers that support people who are medically underserved.

Quality and Safety Systems Branch

By September 30, 2026, leverage clinical laboratory capabilities to increase guideline recommended statin prescribing by 10% for adults with severe hypercholesterolemia who reside in medically underserved communities.

Training and Workforce Development Branch

By September 30, 2025, increase the percentage of graduate fellows and undergraduate interns from under-represented groups and communities by 40% placed in state, local, territorial public health laboratories.

Advancing Electronic Test Orders and Results (ETOR) to Promote Health Equity

What We'll Do

Goal: By December 2025, **30% of newly established ETOR systems** will be between public health laboratories and healthcare providers and systems that support people who are medically underserved.



ETOR enables **direct exchange** of patient information, test orders, specimen data, and test results improving **data quality and timeliness**

Why It Matters

Access to accurate, reliable laboratory results are a critical driver of health



Test ordering and result reporting are often done through **manual or outdated processes** (e.g., mail and fax), which is time consuming and error prone

Complete and timely laboratory data are essential to identify and address health disparities



What we have accomplished

Conducted a baseline assessment of socio-economic factors affecting health to inform the selection of healthcare facilities

Identified healthcare facilities that are supporting medically underserved populations for all 50 states

Created materials about the list of potential healthcare facilities for ETOR implementation

Intersection Between Diagnostic Excellence and Laboratory Testing

- Launching a study to add a **laboratory outreach component** to the [Million Hearts](#)® Quality Improvement / Preventing Health Attacks and Strokes Project
- Engaging federally qualified health centers, centers designed to serve medically underserved communities, and clinical laboratories to prototype and evaluate a process for clinical laboratory outreach to clinicians and patients to improve guideline-recommended statin therapy



DLS in Action: A *prototype process* will soon be launched with Zufall Health, a designated federally qualified health center, and HealthEfficient, a health center-controlled network, in collaboration with LabCorp. This prototype is intended to serve as a model scalable to other healthcare settings, clinical laboratories, and medical conditions.

Fostering A More Diverse and Well-trained Public Health Workforce

- In June, DLS will launch a collaboration with 20 subject matter experts (SMEs) from academic institutions and organizations that serve under-represented students to enhance the Career Pathways in Public Health Laboratory Science fellowships and internships programs
- **SMEs in three fields:**
 - Laboratory science
 - Health equity
 - Diversity, equity, inclusion, and accessibility
- If interested in participating in future years, email LabTraining@cdc.gov

CLIA Program and Health Equity

- The Clinical Laboratory Improvement Amendments of 1988 (CLIA) program provides foundational support to ensure quality laboratory testing and advance health equity goals in U.S. laboratories
 - Quality testing must be achieved regardless of location and populations served
 - Reducing health disparities creates better health for everyone

CLIAC Recommendation to HHS

- CLIAC recommends that **CDC develop guidelines for U.S. laboratories in addressing health disparities**, resulting in a national plan **to champion laboratory engagement in closing gaps in care** that broadly address social determinants of health

Improving Understanding of Laboratory Test Results in a Linguistically Appropriate Manner

Partnered with Kaiser Permanente and the University of Washington to develop a manuscript that identifies gaps and challenges associated with providing linguistically appropriate test results to non-English speaking populations.

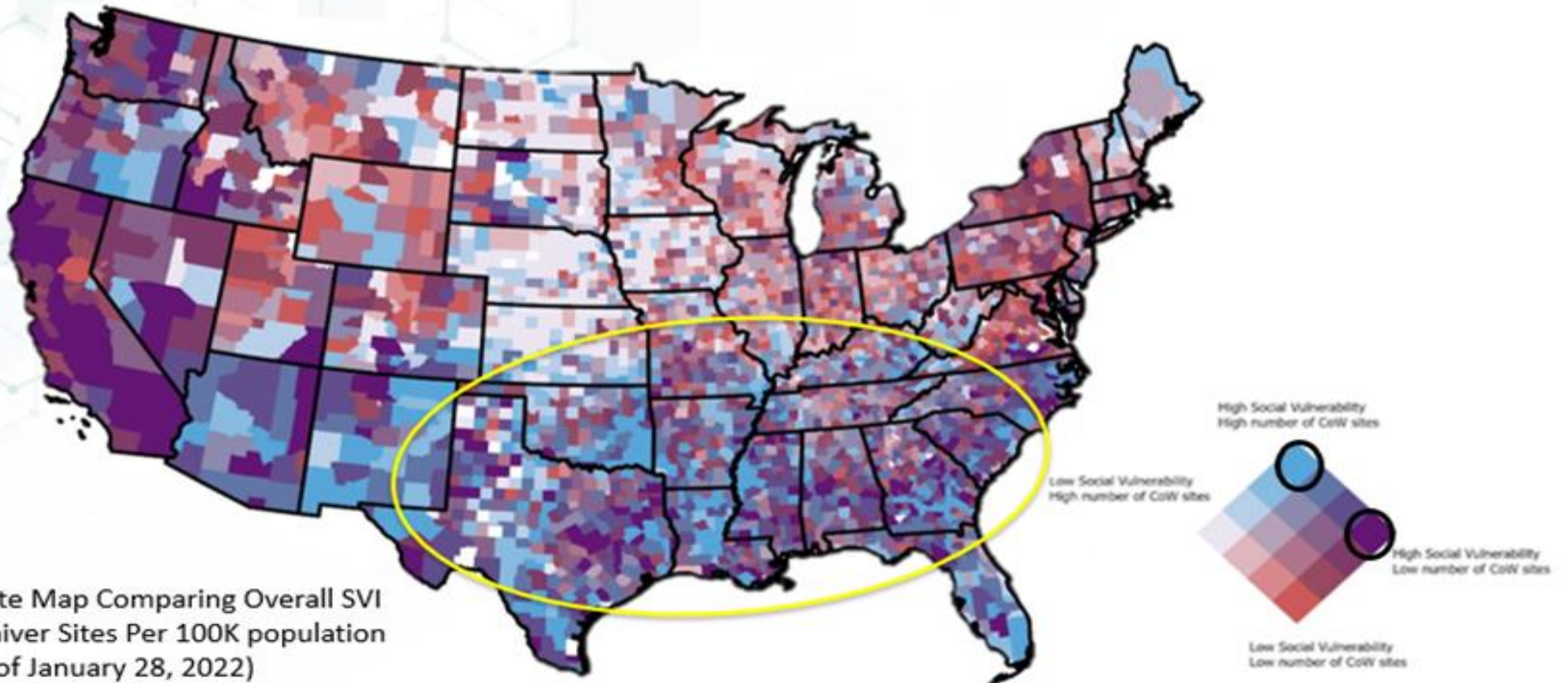
1. **Document barriers** that prevent the use of patient portals by limited English proficient Hispanic patients
2. **Identify potential interventions** to address those barriers

DLS in Action: a manuscript titled *“Effective access to laboratory test results: A health equity issue that enhances diagnostic excellence”* has been published in the Journal of Applied Laboratory Medicine (<https://doi.org/10.1093/jalm/jfac128>).



Division of Laboratory Systems

Health Equity Study: Distribution of Sites with CLIA Certificate of Waiver (CoW) by Social Vulnerability and Geographical Location



County-Level Bivariate Map Comparing Overall SVI and Certificate of Waiver Sites Per 100K population (Active as of January 28, 2022)

Evaluation and Translation of Promising Practices to Increase Equitable Access to POC Testing During Public Health

PURPOSE Evaluate and translate promising practices to increase equitable access to Point-Of-Care (POC) testing during public health emergencies or outbreaks, in particular for communities that were disproportionately affected.

Phase 1 Scoping Review

11/2022 - 09/2023

Identify promising practice strategies and approaches associated with increased access to POC testing for different population groups and/or settings that were disproportionately affected during public health emergencies (PHE)



Phase 2.1 Formative Evaluation

Timeframe TBD

Conduct formative evaluation with up to 9 identified entities that have implemented promising practices in order to assess relevance, effectiveness, and feasibility for broader implementation during future public health events



Phase 2.2 Findings Translation

Timeframe TBD

Translate findings into a toolkit that can be disseminated to clinical and public health laboratory communities, key clinical and public health partners, and community-based organizations for future implementation during PHE





OVERVIEW OF TOPIC PRESENTATIONS



The Laboratory's Role in Advancing Health Equity

- Dr. Alain Koyama - Prevalence and Incidence of End-Stage Kidney Disease in the United States, 2000–2019
- Ms. M.J. Lewis and Dr. Jonathan Genzen - Implementation of the CKD-EPI 2021 eGFR Equation Re-fit without Race Coefficient
- Dr. Shannon A. Novosad and Dr. Brian Rha - Health Disparities in Hemodialysis-Associated *Staphylococcus aureus* Bloodstream Infections — United States, 2017–2020



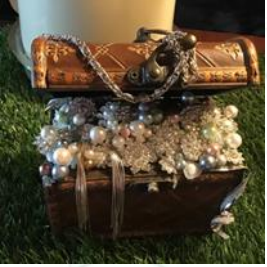
CLIA DISCUSSION QUESTIONS



CLIA Discussion Questions

- How can the clinical laboratory contribute towards closing racial/ethnic inequities in chronic kidney disease?
- Recognizing that the laboratory community has made significant strides in implementing the CKD-EPI 2021 eGFR race-free equation, how do we engage to further advance the implementation of the race-free equation?
- Should CLIA be modified to include professional standards to regulatory authority related to reference ranges? (For example, 42 CFR 493.1253)
- How can the clinical laboratory aid in decreasing racial, ethnic, and socioeconomic inequities among end-stage kidney disease patients at risk for hemodialysis-associated *Staphylococcus aureus* bloodstream infections?

Summary



**The clinical laboratory is a rich source of data and expertise:
True gems in providing diagnostic and clinical management direction.**

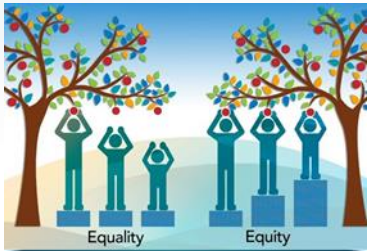


**The clinical laboratory does not perform testing in isolation.
Not a black box!**

- *What happens outside the laboratory impacts what happens inside the laboratory and vice versa.*

Achieving health equity requires inclusion of the contribution of clinical and public health laboratory services.

- *CLIA provides the foundation for health equity in its mission to ensure high quality laboratory services, regardless of setting.*





Thank you!

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