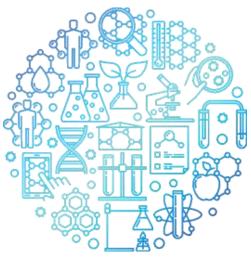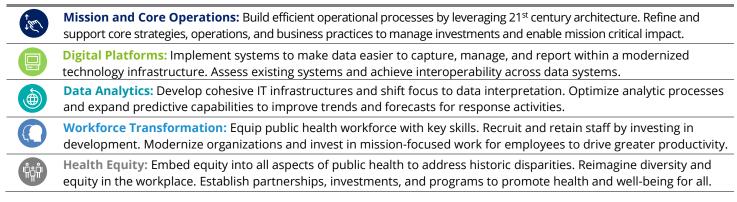# Deloitte.

Helping to Advance Public Health through Scientific Inquiry
Data. Insights. Impact.

We combine data, methods, and experience to discover powerful insights in public health. Our professionals come from many different backgrounds and collaborate to produce research that organizations can use to help improve health-related structures and processes. We have collaborated with many different organizations, both public and private, to help improve public health in the U.S. and abroad.

Our Approach to Research

Develop Relationships: We collaborate with private, public, and non-profit organizations to develop innovative and impactful research of pressing public health issues.

Leverage Existing Data: Our access to various big data sources and benchmarking datasets allow for more efficient and targeted data collection.

Apply Rigorous Methods: Our specialists are trained in all public health professions and the social sciences. We use our methodological experience to discover valid, reproducible public health insights.

Learn from Results: We use empirical evidence to make recommendations for the improvement of public health services and outcomes.

Our Approach to Public Health Transformation

Mission and Core Operations: Build efficient operational processes by leveraging 21st century architecture. Refine and support core strategies, operations, and business practices to manage investments and enable mission critical impact.

Digital Platforms: Implement systems to make data easier to capture, manage, and report within a modernized technology infrastructure. Assess existing systems and achieve interoperability across data systems.

Data Analytics: Develop cohesive IT infrastructures and shift focus to data interpretation. Optimize analytic processes and expand predictive capabilities to improve trends and forecasts for response activities.

Workforce Transformation: Equip public health workforce with key skills. Recruit and retain staff by investing in development. Modernize organizations and invest in mission-focused work for employees to drive greater productivity.

Health Equity: Embed equity into all aspects of public health to address historic disparities. Reimagine diversity and equity in the workplace. Establish partnerships, investments, and programs to promote health and well-being for all.

For additional information on Deloitte and our public health projects, please contact:
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Deloitte Project Presentations *(Includes presentations developed collaboratively with other presenters/organizations)*

Date	Time	Session Info	Name and Description	Presenter
Sun. Nov. 6th	2:45 – 3:00pm	**Type:** Oral **Session:** 2115	**Containment 2.0: Virginia Department of Health's Innovative Approach to Managing a Coordinated Statewide COVID-19 Response** In early 2021, the Virginia Department of Health (VDH) implemented a new framework for COVID-19 containment: Containment 2.0. With a recent influx of funding, VDH wanted to focus on hiring and retaining specialized, deployable, highly-skilled positions able to focus on COVID-19 setting specific guidance from the CDC. Technological improvements, providing a connection to social services, and building public trust were also key focuses of this strategy. A primary goal was to implement systems responsive to the changing nature of the COVID-19 pandemic, while also creating positions and structures that would provide lasting benefits beyond the pandemic. This presentation will focus on the strategies employed and outcomes of Containment 2.0.	Cecelia Gondek, MS
	5:00 - 5:15pm	**Type:** Oral **Session:** 2169	**Effective Strategies for Community-Based "Ecosystem" Models to Advance Health Equity** To advance health equity, organizations should look outside of the traditional healthcare system and address the social, economic, and environmental factors that lead to disparities in health outcomes. Given the inherent complexity and cross-sector nature of these factors, interdisciplinary ecosystem partnerships centered around community voices are needed to make tangible progress. "Ecosystem" models go by different names (e.g., public-private partnerships, collective impact, aligned action) but share the goal of bringing together multiple stakeholders to create, scale, and align impact in ways that are beyond the ability of a single organization. The purpose of this research was to better understand how diverse organizations are currently prioritizing and engaging in cross-sector, community-based partnerships to address the social drivers of health (DOH) and identify factors key to effective collaborations.	Peggah Khorrami, MPH
Mon. Nov. 7th	10:30 – 10:45am	**Type:** Oral **Session:** 3062	**Leveraging Community Feedback to Reduce Health Inequities and Access to Care Barriers in Oregon's COVID-19 Response** Health inequities and barriers to accessing care have been an issue throughout the COVID-19 pandemic. As a result, Oregon Health Authority (OHA) prioritized leveraging community feedback to support the COVID-19 response and reduce health inequities across the state. OHA's COVID-19 feedback management system was designed to center equity while delivering excellent customer service, escalating feedback for systematic response, and tracking and categorizing feedback. To increase transparency, the COVID-19 Feedback Team also prioritized following up with individuals to inform them of how their feedback helped OHA improve its COVID-19 response. Additionally, the COVID-19 Feedback Team regularly shared data with OHA leaders and stakeholders to help enhance agency systems and services.	Colin Sanders, BS
	10:30 – 10:45am	**Type:** Oral **Session:** 3058	**Persistent and Pervasive Inequities in Access to COVID-19 Vaccines: Finding from a Nationally-Representative Survey of Americans** COVID-19 vaccination is the center of our national pandemic response, yet only 66.7% of Americans have been vaccinated and less than half have received booster shots to date. This nationally representative, cross-sectional survey aimed to ascertain Americans' sentiments related to vaccines, trusted sources of information, obstacles to accessing COVID-19 vaccines, and whether increased ease-of-access and incentives could sway the unvaccinated. Findings suggest substantial barriers to vaccine access persist, especially for racial minorities and low-income groups, while monetary incentives have limited efficacy persuading the unvaccinated.	Alison Muckle, MPP
	10:30 – 11:30am	**Type:** Poster **Session:** 3019	**Accelerating Neglected Tropical Diseases 2030 Targets Achievement Through Paradigm Shifts in Country Ownership** The World Health Organization Neglected Tropical Disease (NTD) Road Map identifies country ownership as a strategic pillar to achieving the 2030 control and elimination targets. Increased country ownership is essential to advance the sustainability of NTD programs (NTDPs), strengthen capacities across health systems, and ensure the delivery of comprehensive NTD interventions. This presentation will focus on USAID's Act to End NTDs	West process of the NTD sustainability approach in strengthening	Carly Smith, MPH

Time		Details	Presenter
		country ownership to achieve sustainability milestones.	
10:30 – 11:30am	**Type:** Poster **Session:** 3020	**Facilitating Multisectoral Coordination and Engagement for Neglected Tropical Disease (NTD) Sustainability: From Concept to Implementation** To sustain and accelerate progress made in the control and elimination of neglected tropical disease (NTDs), national NTD programs (NTDPs) must be integrated and mainstreamed into existing health platforms, systems, and infrastructure. Multisectoral coordination within and beyond the health sector contributes to the sustainability of health programs, improves cost-effectiveness, and expands geographical reach. This presentation will highlight the consultation process of USAID's Act to End NTDs | West sustainability approach in prioritizing multisectoral coordination to achieve NTD sustainability milestones.	Stephen Omunyidde
10:30 – 11:30am	**Type:** Poster **Session:** 3019	**Strengthening Data Security Policies and Practices in Neglected Tropical Disease (NTD) Programs** As countries move towards control and elimination targets for neglected tropical diseases (NTDs), reliable data management and secure data systems are required for the preparation of elimination dossiers, drug applications, and intervention programming. While governments across West and Central Africa are adopting national data strategies, Ministries of Health often do not have formal data security policies in place that secure the protected health information of patients. National NTD Programs (NTDPs) have acknowledged the need to standardize data storage to ensure data integrity, analysis, and security, and to facilitate knowledge transfer between staff, assure the validation of their data, and protect data from possible inaccuracies and loss. This poster session will focus on USAID's Act to End NTDs | West program's work with NTDPs to research, develop, adopt, and monitor NTDP data security procedures through a customized four-step methodology designed to ensure accurate, protected data to propel analysis and data-driven decision-making for stronger NTD service delivery.	Bibi Lichauco, BA
1:00 – 2:00pm	**Type:** Poster **Session:** 3127	**A Human-Centered Design Approach to Improving the Mental Health Care Ecosystem** Nearly 53 million US adults experienced some form of mental illness in 2020, yet more than half of them received no treatment. This study considers how to apply a human-centered design approach to make obtaining mental health care simple, intuitive, and non-stigmatizing. By understanding the barriers faced by those attempting to access mental health care, policymakers at the federal, state, and local level, working with community providers, can build the infrastructure and support necessary to meet people where they are with the services they need.	Gwen Blasco
3:00 – 4:00pm	**Type:** Poster **Session:** 3227	**A Framework for Identifying Actionable Feedback Applied to Open-Ended Responses from the 2021 Military Health System Facilities Design Survey** Open-ended survey responses can vary in quality and specificity, which can make it difficult for decisionmakers to sort through and act upon respondent concerns. To support decision-making by gleaning the most useful information from open-ended responses, the Defense Health Agency (DHA) created an 'actionability' framework that identifies responses most likely to contain rich sources of insight to support action planning. The framework was first applied for the Facilities Design Survey (FDS), a biennial survey that seeks to understand patient and spouse perspectives on the features they would like to see integrated in Military Health System (MHS) facilities. Open-ended comments from this survey have historically been constructive and valuable for understanding beneficiary concerns, but DHA wanted to maximize the qualitative data's utility and enable leadership's ability to act on beneficiary feedback.	Sarah Godby, PhD
3:00 – 4:00pm	**Type:** Poster **Session:** 3243	**Vaccine Sentiment among Students, Teachers and Administrators during the SARS-CoV-2 pandemic, insights from the Intentions and Views around COVID-19 Vaccination Among K-12 Populations Report** The need for modernization in rapid disease surveillance reporting systems was apparent prior to the COVID pandemic. Given the variability in implementation of K-12 school COVID-19 mitigation strategies, the Centers for Disease Control and Prevention (CDC) needed more robust real-time accurate information on the heterogeneity in adoption of mitigation strategies across districts to inform public health action responses. To address this need, the *Monitoring School COVID-19 Prevention Strategies project* was developed and piloted to collect data on COVID-19 school prevention strategies and impacts on the social, mental, and physical health	Estephania Hernandez, BA

			of school communities. This analysis highlights differences in COVID-19 vaccination intentions and plans among various groups within K-12 school communities from data collected in May-June 2021.	
	3:15 – 3:30pm	**Type:** Oral **Session:** 3161	**Reimagining the Public Health Ecosystem: Programs, Policies and Systems for Strengthening Community Health** Agency leaders today face a decades-long backlog of funding, two global pandemics, ongoing chronic disease epidemics, the growing threat of climate change, and pervasive inequities that threaten our health, longevity, and trust in government, not to mention a burnt-out workforce. These challenges are not new – but new approaches are needed if we are to overcome them. Through a comprehensive environmental scan including discussions with 35 eminent public health leaders, we identified six mutually-reinforcing dimensions of public health system transformation, and actionable strategies at the local level to approach these aims. Findings suggest the future of public health hinges on strengthening local public health capacity to support effective, multi-sector partnerships for better health and greater equity.	Alison Muckle, MPP
	4:30 – 4:45pm	**Type:** Oral **Session:** 3281	**Dynamic and Adaptive Technical Assistance: Moving Beyond Supporting National Health Systems to Strengthen National Health Systems to Ensure the Sustainability of NTD Control and Elimination** As countries advance towards neglected tropical disease (NTD) elimination and control targets, sustaining progress requires partners to adapt technical assistance, moving beyond strengthening disease-specific programs and service delivery, to supporting national ownership, enabling efforts to systematically integrate NTDs into national systems. This presentation will focus on the USAID Act to End NTDs | West process of adapting technical assistance to foster country-owned and led programs	Carly Smith, MPH
Tue. Nov. 8th	8:30 - 10:00am	**Type:** Roundtable **Session:** 4034	**Where's My Shipment: The Evolution of Customer Experience for Healthcare Providers** The COVID-19 pandemic highlighted the need for a high-touch customer support function to help healthcare providers in the state of Texas with ordering, administration and tracking of COVID-19 vaccine and therapeutics in response to the public health emergency. This presentation will describe the implementation of a consolidated support center including the integration of a customer relationship management (CRM) platform to manage, track, and escalate provider interactions and issues. The consolidated support center offers healthcare providers with an improved customer experience that can scale with changes including the addition of therapeutics and non-COVID vaccines. Additionally, the CRM technology enables monitoring trends in topics and volumes and to adjust support and resources accordingly. Since launching in February of 2021, the Provider Support center has addressed over 32,000 emails and 4,000 telephone messages from healthcare providers. This consolidated support center serves as the model for other agencies seeking to improve their relationship management with key stakeholder communities such as healthcare providers.	Mayra Marquez, MPA
	9:00 - 9:15am	**Type:** Oral **Session:** 4010	**Behavioral Community Segmentation for COVID-19 Vaccine Outreach: A Clustering Analysis and Implementation in Missouri** Despite the significant potential impact, public health efforts often lack or are unable to harness latest data science and behavioral science tools that afford a nuanced understanding of – and concrete approaches to – addressing the unique health needs and barriers faced by different communities. In this work, we applied state-of-the-art data science techniques with evidence-based behavioral science principles to provide a nuanced understanding of different communities in Missouri – from their unique vaccination barriers to levers to pull for outreach. This approach to COVID-19 vaccine acceptance demonstrates a real-world application of "precision public health" and may have applicability to many other priorities within the public health field.	Ellie Chessen, MPP
	10:30 - 11:30am	**Type:** Poster **Session:** 4086	**Public Health Workforce: Diversity, Equity & Inclusion are Essential to Advancing Health Equity** In the wake of the COVID-19 pandemic, calls for racial justice reform, Executive Orders by President Biden, & over $40B in workforce funding; Diversity, Equity, and Inclusion (DEI) initiatives in the workplace have more support now than ever before. In this work, we explore how diversifying public health organizations' talent pipeline, fostering deliberate diversity across all leadership levels, and redesigning work and the workplace, organizations can retain a more diverse and satisfied workforce and	Chelsie White, MS

Time			
		have a positive impact on efforts to move the needle on health equity.	
11:00 - 11:15am	**Type:** Oral **Session:** 4117	**Importance of Coordinated Messaging in Impacted Communities During a National Disaster Medical System (NDMS) Definitive Care Activation from an Overseas Military Conflict** The Department of Defense National Disaster Medical System (NDMS) Pilot Program is reviewing the status of both military and civilian healthcare systems' medical surge capabilities and capacities to care for combat casualties repatriated to the U.S. from a major overseas war. A primary goal is to create new and strengthen existing military-civilian partnerships while addressing opportunities and challenges to improve NDMS readiness across the nation working closely with Federal Coordination Center (FCC) sites. This presentation focuses on the collaborative communication and coordination between Healthcare Coalitions (HCC) and FCCs during NDMS activation, and applicable lessons to Omaha, NE, and the nation.	Val Goodman, MS, MA
1:00 – 2:00pm	**Type:** Poster **Session:** 4186	**Facilitating Public Health Data Sharing through Analytics, Stakeholder Engagement, and Governance** The Texas Department of State Health Services (DSHS) and Deloitte stood up the State Health Analytics Reporting Platform (SHARP) that stores and streamlines analysis of public health data such as infectious diseases and mortality statistics. Data is uploaded from disparate systems, cleansed, transformed, and stored – ready for mandatory reporting, program use, and sharing with external entities. SHARP is a cloud native scalable platform, grounded on governance standards in compliance with regulations. Over 50 agency and external stakeholders were engaged via discovery sessions and surveys to obtain input for the creation of reliable data products and governance processes that meet user needs and preferences. In this work we explore how Texas' experience with analytics, stakeholder engagement, and governance can help agencies modernize how they manage and share data from disparate sources and respond to future public health emergencies with better evidence-based decision making.	Karina Lacouture, MPA
2:30 - 2:45pm	**Type:** Oral **Session:** 4235	**Improving Quality and Access to Tuberculosis Services in Ukraine by Conducting Accurate Costing** As Ukraine has the fourth-highest Tuberculosis (TB) incidence rate in the WHO European Region, USAID Health Reform Support (HRS) analyzed TB services cost data and estimated costs of TB treatment both at specialized and primary healthcare facilities. HRS calculated the costs of drug-sensitive and drug-resistant TB treatment. Moreover, HRS estimated patients' out-of-pocket expenses. This presentation will focus on the results of conducted costing exercises and on modeling the required funding till 2030 to fight against TB in Ukraine.	Maksym Duda, PhD
2:30 - 2:45pm	**Type:** Oral **Session:** 4241	**Revolutionizing the Front Office: Exploring Racism and Bias Among Health Care Staff Interaction with Black Birthing Persons** Racism and bias cause striking disparities in the healthcare experiences and outcomes of Black birthing persons. Interactions with non-health care front office (FO) staff may play a role in these disparities, yet the FO role is understudied. To demonstrate the impact of FO staff interactions on maternal care, we used an Equity-Centered Design to conduct one-on-one ethnographic interviews with Black and White birthing persons [pregnant within the last two years] and compared aligned and contradictory content to identify common concepts, grouped into themes to inform the elements of a proposed redesigned FO for perinatal care.	Susan Nicholson, MD
3:00 - 3:15pm	**Type:** Oral **Session:** 4262	**Gender Awareness Assessment of Health Professionals in Ukraine: Results of The Quantity Study** In August-September 2021, USAID Health Reform Support Project conducted the Assessment of Gender Awareness among Health Professionals in Ukraine, interviewing more than 2,000 health workers at healthcare facilities. The study aimed to assess the gender awareness of health professionals, in particular doctors and nurses. The key findings of the study showed a significant prevalence of gender stereotypes about patients and peers among health professionals. This presentation will focus on key findings from the study, including general gender stereotypes and beliefs about male and female patients and peers.	Alla Boiko, MS

	3:00 - 4:00pm	**Type:** Poster **Session:** 4267	**Using an Equity-Centered Community-Based Feedback Management Process to Create and Implement Public Health Initiatives and Policies** Public feedback has played a critical role throughout the COVID-19 pandemic response and has highlighted a need for community-based approaches to creating and implementing public health improvement policies and initiatives. Oregon Health Authority (OHA) developed an equity-centered comprehensive feedback management process that provides customer service to community members, logs and tracks all feedback data, and escalates cases for systems-level solutions.	Nnenna Anako, MPH
Wed. Nov. 9th	8:45 - 9:00am	**Type:** Oral **Session:** 5025	**Implementation of an Equity-Centered Feedback Management Framework During COVID-19 Pandemic in Oregon** In March 2021, the COVID-19 Feedback Team was stood-up to centralize questions, concerns and complaints being fielded by various divisions across Oregon Health Authority. The team saw an opportunity to not only reduce silos and information sharing across divisions, but to implement an equity-centered and sustainable feedback management team that could be applied to future emergencies, such as wildfires.	Stephanie Serafino, MPH
	9:00 - 9:15am	**Type:** Oral **Session:** 5036	**Doorways to Health: Taking an Implementation Science Approach to Improve Maternal Healthcare Access & Quality** The Deloitte Health Equity Institute is presenting on the "Doorways to Health (D2H) for Mothers of Color program. D2H was launched in January 2022 and will run through December 2023 to support four local teams across the nation implementing maternal health evidence-based programs (e.g., Family Connects, Maternal Safety Bundles) to improve perinatal health equity for underserved Black women. D2H aims to close gaps in maternal health outcomes by locally implementing EBPs, centering the voices of black women, and driving local, state, and federal policy change. D2H teams form a collaborative learning community where each team shares effective local implementation strategies, and the group has developed a shared measurement framework to track outcomes across diverse locations.	Mani Keita Fakeye, PhD
	9:15 - 9:30am	**Type:** Oral **Session:** 5030	**Eliminating Informal Payments for Primary Healthcare Services: Results of Health Financing Reform in Ukraine** In 2018, USAID Health Reform Support Project conducted a Baseline study to measure the frequency of informal payments at the primary healthcare (PHC) level. The follow-up study in 2021 aimed to investigate how the frequency of informal payments changed and whether PHC reform and capitation had impacted this type of corruption. HRS' study found that between 2018 to 2021, the frequency of informal payments fell from 62% to 21%. These results validate that health reforms reduce informal payments and out-of-pocket expenses for Ukrainian patients.	Anna Yushchenko, MA
	9:15 - 9:30am	**Type:** Oral **Session:** 5026	**Technology Alone Won't Make Health Care Supply Chain More Resilient** Many supply chain articles discuss the potential for technology, in particular specific technologies like blockchain and artificial intelligence (AI), to turbo charge supply chain resilience. They delve into how technology will transform an organization's supply chain to be more agile and effective. However, in practice, many technology projects do not achieve their promised return on investment. Research by Deloitte found that organizations, in particular health care entities, are not achieving supply chain resilience by leading with technology. Our research findings illustrated that organizational commitment and robust spending are key factors to increase resilience.	Tom Coleman, EMBA
	10:30 - 10:45am	**Type:** Oral **Session:** 5113	**Design and Implementation of a Novel Rapid Monitoring Strategy for School COVID-19 Re-Opening Strategies: The Monitoring School COVID-19 Mitigation Strategies Project** The need for modernization in rapid disease surveillance reporting systems was apparent prior to the COVID pandemic. Given the variability in implementation of K-12 school COVID-19 mitigation strategies, the Centers for Disease Control and Prevention (CDC) needed more robust real-time accurate information on the heterogeneity in adoption of mitigation strategies across districts to inform public health action responses. To address this need, the Monitoring School COVID-19 Prevention Strategies project was developed and piloted to collect data on COVID-19 school prevention strategies and impacts on the social, mental, and physical health of school communities.	Rhodri Dierst-Davies, PhD, MPH

Time		Session	Author
10:30 - 10:45am	**Type:** Oral **Session:** 5072	**Getting to What Works: Designing and Implementing an Evaluation Model for Effective Health Equity Collaborations** Given the root causes of health inequities often lie outside the healthcare system, cross-sector collaboration is key to advancing equity. In recent years, many new partnerships have emerged to align strengths, skills, and resources across a variety of sectors to advance common health equity goals and address the social drivers of health. However, given the shared responsibility inherent to ecosystem approaches, it is often challenging to measure impact, and few examples of effective evaluation approaches are available in the literature. This study addresses that gap by presenting an impact model, evaluation plan, and outcomes data from real-world experience using an interdisciplinary collaboration model to advance shared health equity goals.	Nicole Kelm, DPT, MPH
10:45-11:00am	**Type:** Oral **Session:** 5067	**Creating a Covid-19 Risk Decision Metric with an Agent-Based Simulation Model** Deloitte built an agent-based model to estimate community-level infections and spread using data on reported Covid metrics, leading estimates of disease spread, and social determinants of health. We leveraged the model's outputs to develop a risk metric that scores communities on a 0-2 scale, with above 1 being "high or increasing risk". This metric has been foundational to Deloitte's return-to-workplace efforts, allowing us to monitor Covid-19 risk in over 140 offices, and standardize reopening decisions throughout the organization. This presentation outlines the creation of the agent-based simulation model and decision risk metric, as well as their applications in an ever-changing pandemic.	Elena Gray, BS
11:00 – 11:15am	**Type:** Oral **Session:** 5085	**Ukraine Hospital Sector Assessment to Inform Planning and Development Decisions** The Government of Ukraine launched a comprehensive reform of the healthcare system in late 2016. The hospital sector reform required an innovative approach and strong analytical support in strategic planning and decision making at all levels of decision making. The critical pillar for that reform is building a capable hospital network. Under the healthcare and decentralization reforms, the local authorities experienced a lack of relevant knowledge, skills, and expertise, and they needed guidelines. This presentation focuses on the USAID Health Reform Support Project approach in data-driven informing decision makers on how to build a capable hospital network.	Liudmyla Khomych, MPH