CDC Advisory Committee to the Director (ACD) Health Disparities Subcommittee (HDS)

Minutes from the April 28, 2016 Meeting

Release Date
July 2016

CENTERS FOR DISEASE CONTROL AND PREVENTION

Table of Contents

Advisory Committee to the Director Health Disparities Subcommittee: Record of the April 28, 2016 Meeting 2
Call to Order / Roll Call / Overview of Agenda and Updates from HDS Chair 2
OMHHE Updates 4
Discussion Points 8
Update on Health Equity Indicator Recommendation 10
Discussion Points 11
Updates on Training/Professional Development Recommendation 15
Discussion Points 17
Updates on Training & Professional Development Recommendation 20
Discussion Points 22
Health Disparities and Environmental Justice 22
Discussion Points 26
HDS Updates/Feedback 30
Discussion Points 31
Public Comment 38
Closing Remarks / Adjourn 38
Certification 40
Attachment #1: Meeting Attendance 41
Attachment #2: Acronyms Used in this Document 44

Advisory Committee to the Director Health Disparities Subcommittee: Record of the April 28, 2016 Meeting

The Centers for Disease Control and Prevention (CDC) convened a meeting of the Health Disparities Subcommittee (HDS) of its Advisory Committee to the Director (ACD) on April 28, 2016, in the Global Communications Center on the Roybal Campus, Clifton Road, Atlanta, GA. The agenda included updates from the Office of Minority Health and Health Equity (OMHHE); updates on progress on the HDS recommendations to ACD; a presentation and discussion with Dr. Patrick Breysse, Director of the National Center for Environmental Health (NCEH) and the Agency for Toxic Substances and Disease Registry (ATSDR); and a discussion of next steps and action items for HDS.

Call to Order / Roll Call / Overview of Agenda and Updates from HDS Chair

Leandris Liburd, PhD, MPH (Director, Office of Minority Health and Health Equity (OMHHE), Associate Director for Minority Health and Health Equity, Centers for Disease Control and Prevention (CDC)/Agency for Toxic Substances and Disease Registry (ATSDR); Designated Federal Official (DFO), Health Disparities Subcommittee (HDS)), called the meeting to order at 8:44 a.m. on Thursday, April 28, 2016.

Dr. Liburd called roll and established a quorum of HDS Subcommittee members present in person and via telephone. Quorum was maintained throughout the duration of the meeting.

Lynne Richardson, MD, FACEP (Chair, HDS Subcommittee) greeted the group. The new and returning HDS Subcommittee members introduced themselves and their professional and research focus areas. A participant list is appended to this document as Attachment #1. The following HDS members disclosed conflicts of interest:

- Dr. Marguerite Ro's organization is a recipient of CDC's Partnerships to Improve Community Health (PICH) grant.
- Ms. Mildred Thompson's organization is a recipient of CDC grants.

Dr. Richardson observed that after transitions in membership, HDS is poised to launch a new set of initiatives and priorities. Feedback had been gathered from some of the longstanding HDS members regarding how the subcommittee can be more effective and have impact on important issues. She provided an overview of the day's agenda and invited HDS members to share updates on new activities and initiatives from their organizations and institutions.

Dr. Will Ross reported that Washington University is offering a combined Medical Doctor (MD) and Master of Public Health (MPH) program. The program has discussed how to have maximal impact on local, national, and global disadvantaged communities. The institution will begin an MPH program in Haiti, having met in Haiti with their health ministers and signing a letter of agreement with the City University of New York (CUNY). The group is working with the Carter Center to begin an undergraduate and then a graduate program. They have been pleased to receive support from the Haitian government. Much needs to be done to address disparities in the US, so they were cautious regarding beginning a collaboration outside the country. Haiti is a place of great need.

Mr. David Fukuzawa and Ms. Mildred Thompson announced a collaboration between PolicyLink and the Kresge Foundation. *Healthy Communities of Opportunity* is a policy brief focused on the intersection of health and housing. The brief was motivated by growing observations of the connections between health and housing, such as work with permanent supportive housing and the use of housing as a platform to deliver services. The "healthy housing" movement began with a focus on lead and has since migrated to other issues. Further, there are increasing examples of the public health impacts of housing and stability, which manifest in many ways, such as displacement due to gentrification. Literature is accumulating regarding the impacts of housing on public health, and there was a need for a summative document to analyze the literature and to provide a set of policy recommendations. *Healthy Communities of Opportunity* is available in hard copy and online.

Ms. Cherie Wilson said that Robert Wood Johnson University Hospital (RWJUH) in New Brunswick, New Jersey merged with Barnabus Health to create the largest health system in New Jersey, RWJ Barnabus Health. The hospital received Human Rights Campaign Healthcare Equality Index leader status for 2015 and 2016, as did two other hospitals within the newly-merged health system. They are developing a business plan for a lesbian, gay, bisexual, transgender (LGBT) health clinic. In the process, they discovered a lack of support groups for families of transgender persons, so they launched a support group to meet this need. The health system also focuses on workforce diversity. There is a magnet high school on the hospital's campus for students with interest in the health professions. The students have access to internships in a variety of areas. The 11 hospitals in the system are at different stages in the diversity, inclusion, and health equity spectrum.

Ms. Thompson added that PolicyLink hosted its summit in October 2015 in Los Angeles, California. The meeting convened 3000 health equity advocates and leaders. PolicyLink recently received two grants from the Robert Wood Johnson Foundation (RWJF). One grant supports a data disaggregation project to build understanding of the health conditions, concerns, and inequities within certain ethnic populations, such as Latino and Asian populations. The other grant focuses on promoting a culture of health, helping organizations that may not perceive themselves as health organizations to understand the role that they play in health equity. The "Open Box Initiative" will create Health Equity Ambassadors across the US. They will gather five times per year to receive training on how to incorporate health equity into their work.

Dr. Maureen Lichtveld said that the Hispanic-Serving Health Professions Schools (HSHPS) has launched its strategic plan and now includes 44 members representing schools of medicine, public health, dentistry, pharmacy, and nursing. In addition to offering US Department of Veterans Affairs (VA) fellowships, HSHPS is working through the Office of Minority Health (OMH) to place fellows. She will testify before the Congressional Black Caucus (CBC) on research, healthcare services, and creating a culturally competent healthcare workforce.

Ms. Bobbi Ryder noted that this meeting would be her last with HDS, and said that she has been honored to serve on the subcommittee. The field of migrant and seasonal agricultural worker health focuses on an underserved and hard-to-serve population. She described the launch of a five-year effort to reach a larger proportion of this population. Since the inception of the Migrant Health Program in 1962, the program has not reached more than approximately 850,000 migratory and seasonal farm workers. There are between 4.5 and 5 million such workers in the US, and the new goal is to serve 2 million of them or approximately 50% of the population by the end of 2020. There have been increases in federal appropriations, which should result in increases in capacity and the local level to serve farm workers. This population could be included in the work of the Health Equity Ambassadors.

Dr. David Williams recently returned from the inaugural World Indigenous Cancer Conference (WICC) in Australia. He was struck by the similarities of health challenges among indigenous people and stigmatized populations throughout the world. It will be useful to deliberate these issues from international perspectives, learning from activities and challenges that cross international boundaries.

OMHHE Updates

Dr. Liburd shared OMHHE's work since the last HDS meeting in October 2015, as well as the office's progress toward achieving the recommendations forwarded by HDS and ACD. This January marked Dr. Liburd's fifth year in OMHHE. The office has accomplished a great deal.

OMHHE envisions a world where all people have the opportunity to attain the best health possible. That framing of health equity shapes the office's work within the science-driven, technically-oriented CDC. OMHHE feels that it is important to reflect the best-available evidence in the emerging field of health equity. While more than 30 years of work have taken place since the 1985 release of the Secretary's Task Force Report on Black and Minority Health, knowledge has become more sophisticated regarding the drivers of health disparities as well as what is needed to mitigate them.

Dr. Liburd thanked Dr. Lichtveld for her leadership in helping to define more fully environmental factors associated with health equity. Environmental factors include policy and the social environment, as well as the physical and built environments. These factors work together to create, or to undermine, health. The recent editorial in the *Journal of Public Health Management and Practice* (*JPHMP*) notes that a silo-based approach to public health is inadequate to reduce health disparities and create health equity.

OMHHE is working toward several strategic priorities, which are divided into four components that reflect the units within OMHHE.

Health Equity
Decrease health disparities, address social determinants of health, and promote access to high-quality preventive healthcare.

Women's Health
Support and protect the health and safety of women and girls by addressing health issues and identifying solutions.

Diversity and Inclusion
Create an organization where CDC leadership embraces diversity and inclusion and protects the health of diverse populations.

Organizational Capacity
Increase organizational capacity by aligning all resources to achieve strategic priorities.

OMHHE is a small office with a big vision and has accomplished much, given the resources available. Dr. Liburd described several achievements since the HDS meeting in October 2015.

Regarding the Health Equity goals, OMHHE has been creating, vetting, and guiding through the approval process a Language Access Plan (LAP) that will become a policy for CDC. There are life and death implications associated with the agency's ability to reach persons with limited English proficiency. Providers should be able to communicate with the populations they serve. Well-trained interpreters and appropriate written materials are also critical.

The Joint Action Plan to Eliminate Racial and Ethnic Discrimination and Promote Equality (JAPER) is a binational agreement with Brazil that was established in 2008. OMHHE has collaborated with other federal entities to build relationships with colleagues in Brazil to share knowledge regarding reducing health disparities, increasing diversity in the public health workforce, and other related issues such as reducing discrimination and improving access to culturally competent healthcare. A meeting was held in December 2015 with Brazilian colleagues and representatives from 14 countries. CDC reached out to Pan American Health Organization (PAHO), which has similar interests and serves the entire region. The country representatives shared their experiences regarding gender disparities and inequalities, as well as other discriminations directed toward Afro-descended people.

OMHHE has had two important publications. A special supplement of *JPHMP* on health equity was released in January 2016, in collaboration with Association of State and Territorial Health Officials (ASTHO). There was wide cooperation and co-authorship from across CDC and public health colleagues across the country in creating the supplement. A piece by Dr. Richardson focused on the HDS recommendations to ACD and CDC, and the reach and impact has been significant. In February 2016, a second *Morbidity and Mortality Weekly Report* (*MMWR*) Supplement on Strategies for Reducing Health Disparities was released. These publications reinforce that health disparities can be reduced, and eliminated in some cases. This work requires particular kinds of actions. The strategies reported in the *MMWR* have been rigorously evaluated, and their effectiveness is established.

2016 is the fifth year of the CDC Undergraduate Public Health Scholars (CUPS) program and the 27th year of the Ferguson Graduate Fellowship in Emerging Infectious Diseases. In this fifth and final year of the CUPS cooperative agreement, there have been over 16,000 applicants to the program, with 913 students completing the program. The program is clearly desirable, and the final participation numbers are resource-driven. CDC is tracking the students who complete the programs to learn whether, and how, they pursue careers in public health. These programs are helping to create a pool of diverse and well-prepared public health workers.

The third Millennial Health Leaders Summit took place March 31-April 1, 2016. This activity began in the fall of 2011 in collaboration with the Harvard School of Public Health (HSPH). Over time, the partners have expanded to include Brown University, Princeton University, and the University of North Carolina (UNC) at Chapel Hill. This year's summit had 52 students, representing over 20 schools of public health, nursing, and medicine from across the nation. The participants are graduate students in medicine, public policy, or public health. At the summit, CDC shares with the students the agency's work related to health equity, introducing them to the complexities of the field. The students also learn how CDC approaches social determinants of health (SDOH), minority health, health disparities, and health equity. Based on evaluations from the first two years of the summit, this year's event included a Career Fair with representatives from post-graduate opportunities. The program will grow in intentional ways.

A high-energy, well-attended meeting of the National Health Equity Leadership Academy was held in Atlanta, Georgia on April 11-12, 2016. This meeting brought together state, local, tribal, and territorial offices and centers of minority health and health equity. Health offers were also invited to attend. The meeting provided an opportunity for OMHHE to share work on developing the Health Equity Framework for Action, one of the HDS recommendations. The attendees represented many states, large cities, and localities, as well as CDC representatives. The meeting is intended to build relationships among these offices.

The second Public Health Ethics Forum was held on April 22, 2016. The 2015 Forum was a celebration of the 100th anniversary of the establishment of National Negro Health Week, which evolved to become National Minority Health Month. It also commemorated the 100th anniversary of the death of Booker T. Washington, the creator of National Negro Health Week. Tuskegee University is CDC's partner for the forums. The relationship between Tuskegee and CDC is being redefined as a partnership to advance health equity in the US. This year, the Forum included the National Alliance for Hispanic Health, the National Hispanic Medical Association, and HSHPS to advance a public health ethics framework on data collection for social justice. The gathering included over 220 participants, some of whom participated online. The forum was an opportunity for OMHHE to host the new Director of the National Institute for Minority Health and Health Disparity (NIMHD), Dr. Eliseo J. Pérez-Stable.

The CDC Office of Women's Health (OWH) is recruiting a new director, who should be in place by the fall of 2016. Since the last HDS meeting, OMHHE has initiated the Diversity Culture Audit. The process includes a survey, focus groups, and individual interviews. It will establish how CDC personnel feel about the workplace, particularly regarding inclusion, morale, visibility, and opportunity for advancement. The audit will take place through the beginning of June 2016, and the data will be analyzed and ready to be reported at the October 2016 HDS meeting.

In order to pursue the goal of increasing organizational capacity by aligning resources to achieve strategic priorities, OMHHE has been working for some time with the State, Tribal, Local, and Territorial (STLT) Subcommittee of ACD. They are making good progress toward creating a more visible SDOH presence at CDC. OMHHE continues its work with Healthy People (HP) 2020 topic area website, adding objectives and resources regarding effective programs across the country. Internally, OMHHE is working with colleagues in the Office for State, Tribal, Local and Territorial Support (OSTLTS) and the Office of the Associate Director for Policy (OADP).

Dr. Liburd indicated that the day's meeting would include updates on progress on three of the HDS recommendations:

- Develop a CDC framework for action to achieve health equity
- Identify and monitor indicators of health equity
- Support training and professional development of the public health workforce to address health equity

In terms of developing a CDC framework for action to achieve health equity, in addition to the journal supplement and the meeting with representatives from offices of minority health across the country, ASTHO is developing a report. The suggestions from the report will be incorporated into OMHHE's work to support the framework not only at CDC, but also across governmental organizations and entities. The last State of Health Equity at CDC Forum will be held in October 2017, and its focus will be on infrastructure. HDS should decide whether to hold its fall meeting the same week as the ACD meeting and to schedule the Forum such that HDS members can attend it as well.

Kem Williams, MBA (Acting Deputy Director/Management Officer, OMHHE, CDC/ATSDR) shared with HDS an overview of OMHHE's staffing and resources. Mr. Williams explained that as Management Officer, he is responsible for administrative and business functions of OMHHE. His job is to execute Dr. Liburd's vision with the available resources.

OMHHE is a "small but mighty" organization, with 30 full-time equivalent (FTE) personnel. Their capacity is somewhat limited by their size, but they leverage their available resources to accomplish their mission. Their work relies on collaborations, support, and work with many other organizations, large and small.

The structure of OMHHE appears to be hierarchical, but the staff is cross-functional, as they all work together and take on joint responsibilities within the office. For instance, the new position of Associate Director of Communications (ADC) was filled by Dr. Laura Ross. She has worked at the "thousand-foot" strategic level as well as "on the ground." Her approach is indicative of the OMHHE staff.

Some staff members have multiple roles. The Associate Director for Science (ADS), Dr. Ana Penman-Aguilar, is also the Science Team Lead. Mr. Julio Dicent-Taillepierre serves as the lead of the Initiative and Partnership Team. While there is not a formal director of the OWH since the retirement of Captain Yvonne Green, there has been a great deal of enthusiasm and interest expressed in the position for this critical area. In the interim, Diane Dennis-Stephens has helped to move the office forward.

Regarding the OMHHE budget, 95% of its dollars are allocated to personnel costs for salaries and benefits. With only 5% of the budget remaining, it is important to prioritize and manage those resources wisely and to collaborate with other groups in order to pursue the office's goals. Further, because CDC is frequently responding to public health emergencies such as Zika and Ebola, staff from OMHHE are deployed as part of the response, either overseas or to the Emergency Operations Center (EOC). Many OMHHE staff have unique skill sets, especially in languages. The need for language expertise has become increasingly prevalent.

Discussion Points

Dr. Mary Garza asked whether the link to the forum on Hispanic health is still available. Dr. Laura Ross (Associate Director of Communications, OMHHE, CDC/ATSDR) replied that when they are transcribed, the materials will be posted online and the link will be shared with HDS members.

Ms. Bobbi Ryder asked for an email copy of the slides from Dr. Liburd's presentation.

Dr. Donald Warne commented that the National Leadership Academy seemed like a great event. He wondered how CDC engages health officers and how to engage tribal health officers regarding these opportunities.

Dr. Liburd answered that invitations to the event were sent to all state and local health officers with offices or programs related to minority health and health disparities. She was not sure how tribal health officers were engaged.

Regarding building equity and inclusion, Dr. Warne pointed out that one of the challenges in Indian Country is that ASTHO and the National Association of County and City Health Officials (NACCHO) include state, territorial, city, and county health personnel, but do not include tribes. He suggested outreach to the National Indian Health Board (NIHB) to communicate with tribal health leaders. Structurally, the current environment of public health governance typically does not include tribes. He offered to help build those connections.

Dr. Marguerite Ro congratulated Dr. Liburd and the OMHHE staff on their busy and productive six months. She expressed particular excitement about the LAP, which presents a significant opportunity for CDC to forward a standard plan that can trickle down to state and local health departments. Several months ago, the Office of the National Coordinator (ONC) of the US Department of Health and Human Services (HHS) released its LAP and policy clarification that relates to insurance exchanges. While public health accreditation is still voluntary, it serves as a guideline for establishing policies and structures of public health. It is missing a concrete, dedicated LAP, either via a larger governmental infrastructure, or specific to public health departments. This idea is linked to indicators and could link to creating a plan or policy regarding data disaggregation, institutionalizing and forwarding broad thinking. It might be useful to compare the ONC language access materials to the CDC materials, especially since the CDC plan is not yet a policy.

Dr. Will Ross applauded CDC and OMHHE for reaching out to young people, building their excitement about careers in public health and connecting them with opportunities to build their skill sets and competencies. This pool of young people could serve as health ambassadors, and it would be beneficial to connect them with the RWJF-funded initiative described by Ms. Thompson so that they might

disseminate public health messages creatively. Additionally, the collaborative work between OMHHE and OSTLTS presents opportunities to connect these young people with Indian Country.

Dr. Maureen Lichtveld added her congratulations for OMHHE's active six months, especially given their small staff. Regarding the outreach to young people, it is critical not only to track their career progress, but also to feature them. Tulane University has a similar program that imbeds high school scholars in its laboratories. Their personal stories are important and they also return to serve as mentors for new scholars, enriching the program. She asked about next steps for the high-level recommendations and priorities that emerged from the Hispanic Health Forum.

Dr. Liburd agreed that the priorities were an important element of the meeting, as they showed participants how they can apply the day's lessons and ideas in their organizations. The priorities are being coalesced into a document. It is important to make them visible, and conversations are ongoing regarding how best to position them.

Mr. Hector Vargas expressed appreciation for OMHHE's great work. He emphasized Dr. Ro's point regarding the coordination and integration of language access and data disaggregation, particularly for Asian ethnic communities. The two areas need to inform each other, and OMHHE may need more support to further these issues.

Dr. Liburd noted that the work includes CDC's Health Literacy Council and should be more intentional regarding persons with limited English proficiency. These elements can have profound, positive health impact.

Dr. Lichtveld said that the presentation on language access emphasized the importance not only of ensuring proficiency in translation, but also of building the workforce that looks like the people they serve. Building the minority health workforce should go hand in hand with increasing language access in order to improve quality.

Regarding workforce, Dr. Ro commented that there should be representation at all levels. In her experience at a county health department, there is diversity at the entry level, but higher and executive levels do not have that diversity. This situation is mirrored across the country. Efforts might be directed at mid-level professionals to ensure that they reach executive-level positions. The "pipeline" is critical, but so is the "glass ceiling" that communities of color still face.

Dr. Lichtveld added that the same situation persists in academia.

Dr. Garza observed that OMHHE had been extremely productive in the last six months, even amidst staff turnover. She thought it would be helpful to see the names associated with each of the roles in OMHHE, as HDS does not meet everyone.

Dr. Lichtveld asked about the potential to imbed a culture of health equity by detailing staff from other areas of CDC to OMHHE.

Mr. Williams said that Dr. Liburd's leadership has raised OMHHE's profile within CDC, and they have been approached by CDC personnel for the opportunity to spend time in the office.

Dr. Lichtveld proposed formalizing this arrangement, perhaps through a fellowship.

Dr. Ro praised Dr. Liburd for building and growing OMHHE over the last five years. Given that OMHHE remains a small office, she expressed interest in seeing the investment in the office across different budget periods. If health equity is a priority for the agency leadership, there should be a concomitant increase in support.

Mr. Williams answered that OMHHE has gained five FTEs in the last 15 months. Relative to the size of the office, this increase is significant. They are presenting the business case for why and how, with additional capacity, they can achieve greater results.

Dr. Liburd added that when she started in the office in 2011, there were 15 FTEs. She asked Mr. Williams to describe how OMHHE's budget changed after the addition of OWH and Diversity and Inclusion Management.

Mr. Williams said that the addition of those two elements resulted in a 30% increase to the OMHHE budget.

Dr. Ro said that there are significant health disparities between men and women. At the same time, there is need for attention to men's health, especially men of color.

Mr. Williams commented that OMHHE is the CDC lead on My Brother's Keeper, the White House Initiative on Black Men. Dr. Liburd added that some years ago, OWH established a website on men's health that was focused on men of color.

Dr. Warne endorsed the idea of focusing on the health of men of color. He noted that white women still have a 10-year life expectancy gap over men of color, and the life expectancy of African American women has been consistently higher than white males for some time. Men of color face numerous challenges, and women still face systematic oppression. Attention to these challenges is important.

Dr. Will Ross asked to hear more about OMHHE's relationship with the White House through My Brother's Keeper at a future HDS meeting.

Update on Health Equity Indicator Recommendation

Ana Penman-Aguilar, PhD, MPH (Associate Director for Science, OMHHE, CDC/ATSDR) described progress on the HDS recommendation to establish and monitor health equity indicators. There has been a recent proliferation of national health equity indicator sets and guidance. For example, the Prevention Institute Indicators were funded by the RWJF, and the National Collaborative for Health Equity (NCHE) is currently developing a National Health Equity Index. HDS member Dr. David Williams and Dr. Penman-Aguilar are both involved with that effort, which presents an opportunity to "cross-pollinate," specifically regarding connecting with methodologists from CDC, primarily from the National Center for Health Statistics (NCHS). The article published in *JPHMP* has been helpful to NCHE in the development process. The team includes representation from the HHS OMH who has been seconded to NCHS.

In parallel, OMHHE is pursuing a workforce diversity indicator through a health equity lens. This work is important, as many of the ongoing efforts to build indicators do not incorporate these issues. OMHHE is including public health, physicians, dentists, pharmacists, nurses, and, if possible, physician assistants and social workers. A literature scan has been conducted, and it does not appear that the OMHHE work is duplicating work from the Health Resources and Services Administration (HRSA) or others. For example, OMHHE will disaggregate data differently from HRSA.

OMHHE is honing in on data sets and measures. The work began with the NCHS Health Area Resource File. It is preferable to work with the component data from organizations such as the American Medical Association (AMA), however. It is important that this work has a health equity focus. The public health and healthcare workforce representation should incorporate the workforce, people of working age, and populations served. There are different equity implications to each approach, such as access to opportunity, the appropriateness of services, and others. The indicators should incorporate decision-making power. It might be possible to integrate payroll data as a proxy for decision-making power. OMHHE is considering other links to build on this idea.

Dr. Penman-Aguilar indicated that she would reach out to individual HDS members for specific recommendations as the work progresses.

Discussion Points

Dr. Richardson asked about the timetable for the NCHE indicator development process, such as when a draft might be expected and whether there will be opportunities for larger input.

Dr. David Williams said that there is a timetable, and it may have some flexibility. He clarified that he is not part of the day-to-day operation of the project. He serves as Chair of the National Advisory Committee. The first report of the National Health Equity Index is likely to be released in approximately October 2016. A second series of reports is planned for Spring 2017, which will capture health equity indicators state by state.

Dr. Richardson thanked Dr. Williams and asked whether it can be assumed that the same set of indicators will be applicable for other jurisdictions, such as local, tribal, or territorial.

Dr. Williams answered in the affirmative and added that there are also plans to create reports focusing on three communities to showcase how the information from the indicators is useful and valuable at the local level. It has not been decided which communities will receive focus. He expected that there will be diversity among the selected communities. It is possible that the communities will illustrate progress that is being made and initiatives that are being implemented.

Regarding the National Health Equity Index, Dr. Ro wondered whether measures related to systems or policies would be included. At the local level, it takes enormous investment in time to shift population health measures. Given the political system in which funding is for three to five years and improvement must be demonstrated, it is challenging not only to achieve improvements, but also to sustain them. When improvements are sustained, it is frequently due to systems change or policy shift. Law Atlas is a resource that can serve as a tool for policy surveillance. It allows local officials to consider and compare the quality of policies from different regions and areas. She expressed hope that the indicator development process would reach beyond finding the appropriate health equity indicator or disparity measure and would help determine how to benchmark progress at a systems and policies level.

Regarding the Workforce Diversity Index, she appreciated the issue of power, especially given the lack of diversity at the executive level. She encouraged thinking beyond healthcare providers in order not to overlook influencers and leaders who work with healthcare and public health to create healthy communities and equitable conditions.

Dr. Penman-Aguilar suggested further discussion regarding how to assess diversity at the executive level.

Dr. Richardson expressed interest in the idea of utilizing payroll data, perhaps as percentiles, given variations in salaries across disciplines and organizations. For any organization or entity, there should be available information regarding how many direct or indirect reports an individual has. Salary and income disparities could confound approaching the question by income. It would be interesting to see discrepancies between scope of influence by looking at direct reports and salaries. In many organizations, influential people do a lot of work and are not well-paid, while some people are well-paid and are not as productive.

Dr. Ro encouraged consulting the Sullivan Commission on Diversity in the Healthcare Workforce. Morehouse University led that body of work, which incorporated executive and managerial levels.

Dr. Richardson noted that the Sullivan Commission report was medicine-oriented, but utilized the same framework.

In addition to variations in payroll, Dr. Lichtveld noted that states vary in how they remunerate their workers, which brings additional complexity to the issue. The intersect of workforce and diversity is not only concerned with output. It is important also to consider their training, career trajectory, the population they serve, and the impact of their service. This benchmarking will open a new kind of indicator and index. There must be a level of reliability and validity. She expressed her hope to learn more about the methodology of how the index was created and its validity and reliability before it is rolled out nationally. She applauded the approach of highlighting local areas and communities where progress is being made. A clear path to intervention (good news) should be published with the indicators.

Ms. Thompson expressed gratitude that CDC is in partnership with these national indicator efforts. When work is disparate and isolated, their differences and similarities are not clear. She asked how the process will ensure input from people on the ground who see impact; that is, how are findings being shared and translated? This work is important, and it should not remain within the field. The results of this work could unite sectors. It should be messaged without jargon and in a manner so that people can see themselves in it, and see a path to becoming involved.

Dr. Penman-Aguilar thanked Ms. Thompson for helping to bring together groups that could have worked at cross-purposes. She agreed with the importance of incorporating new elements into the workforce indicators so that they can be actionable, serving as more than pieces of information. A more robust indicator will enable communications and the development of synergies at the actionable level. Recently, OMHHE had a consultation with the National Association of State Offices of Minority Health (NASOMH). The input from that meeting regarding monitoring programs will be very valuable at an elevated level and a good start to their work.

Regarding workforce indicators, Dr. Warne asked about discussion regarding the diversity of health professions faculty members. From an American Indian perspective, students tend to go to universities where there is at least one American Indian faculty member. Unfortunately, most institutions of higher education focusing on medicine, nursing, public health, and related health fields have no American Indian faculty members. This issue has influence over where people go and whether they are successful when they are there.

Dr. Penman-Aguilar said that the suggestion is excellent. OMHHE and NCHS colleagues are currently deciding on their focus areas.

In applying a health equity lens across CDC and constituents, Dr. Will Ross commented on the need for metrics to document impact. Metrics are challenging, and there should be effective messaging. OMHHE's communications staff must be involved in developing metrics, especially metrics that can be embraced.

Dr. Penman-Aguilar said that Dr. Laura Ross has been helping to shape the health equity lens across the agency, and she will also participate in the indicators work.

Dr. Will Ross expressed hope that HDS could provide feedback regarding the indicators that are being considered, as well as the potential metrics.

Dr. Penman-Aguilar said that the larger indicator set work is taking place with NCHE. HDS will be included in the workforce indicator work at CDC.

Dr. Richardson clarified that the indicator development process is currently ongoing. She noted that HDS would like to pursue opportunities to provide input into the NCHE indicators before they are published in the fall of 2016. The workforce diversity indicator is an internal CDC process. HDS will be included in that process. She expressed hope that HDS would be able to endorse it when it is formalized, perhaps making a formal recommendation to ACD.

Dr. Willi Horner-Johnson commented on the importance of reaching the ground level and creating opportunities for community members from diverse groups to provide input regarding what is important them to have measured and reported as part of the indices.

Dr. Garza expressed hope that HDS could provide input into the NCHE indicators before the report is final, perhaps seeing drafts of the report. She welcomed the opportunity to learn more about the methodology of the development process, and thought it would be helpful to review drafts before the fall HDS meeting so that they could be more productive when they are in person.

Regarding the workforce diversity indicator, Mr. Vargas asked about the extent to which sexual orientation and gender identity are being addressed and included, both in terms of the demographics of providers and through the health equity lens. He offered his support and assistance in this area, if needed.

Dr. Penman-Aguilar welcomed his assistance, as they are seeking data sources in these areas.

Dr. Lichtveld noted that a critical gap in developing workforce indicators is a lack of data. It is equally important to use available data and to identify data gaps. The gaps link to the inability to benchmark and to determine whether a policy is working. She developed CDC's Strategic Plan for Workforce Development some years ago and formally volunteered to assist in the ongoing efforts. She suggested that HDS form smaller groups that can work actively on a particular topic between the larger HDS meetings. She also suggested that OMHHE pose specific questions to HDS so that the subcommittee could provide substantive input and to serve as advocates both nationally and within the institution.

Dr. Ro noted that the de Beaumont Foundation has been leading the charge on public health workforce. They recently conducted a national public health workforce survey, which yielded detailed data. The work was led by JP Leider.

Regarding the NCHE National Health Equity Index, Dr. Williams explained that the work has been ongoing in collaboration with several organizations. The National Advisory Committee met with the development team in December 2015. The large and diverse committee provided strong input; more, in fact, than could be used in one index. The "horse is out of the barn" for that part of the process, but the leaders of the work desire to develop as good an index as possible and are likely to be receptive to feedback, either formally from HDS as a group, or from individual members. He urged them to reach out immediately if they choose to do so, as the process is moving quickly. He offered to share the available materials with HDS. Additionally, he described his work with the National Health Service (NHS) in the United Kingdom (UK), which has done innovative work in the area of workforce diversity. The NHS is the largest employer of black and minority ethnic persons in Europe. The *British Medical Journal* (*BMJ*) recently published work by Naomi Priest and colleagues regarding the collection of diversity measures and other important issues.

Ms. Wilson added the resource of the NHS Workforce Race Equality Standard, which is supported at the NHS by Yvonne Coghill.

Ms. Ryder recalled the Hispanic Agenda for Action, which was developed through a group that met at the University of California, Los Angeles (UCLA) approximately 15 years ago. The agenda resulted in Executive Orders and has been included in both HRSA and CDC documents. She encouraged OMHHE to resurrect the package, of which Mr. Dicent-Taillepierre has a copy. She also suggested working with HRSA-funded organizations at the local and national levels. The network of HRSA Community Health Centers (CHCs) served approximately 23 million people in 2015, and patrons visit the CHCs an average of 3.5 times per year. This resource presents an incredible opportunity for the incubation of policy and research, as a grassroots place for recruitment and retention. She further cautioned against utilizing persons of diverse color and ethnicity as a proxy for broader inclusion of diversity in policy development, service delivery, and research content. As has been observed in educational arenas, there can be a backlash to the separation of diverse population groups. A proxy for inclusion could be teams of collaborators, individuals working on different projects that represent multiple ethnicities and all groups in a location, including minority and majority, not just one or the other. As conflicts build in local communities and political agendas, people may not be inclined to work together.

Dr. Penman-Aguilar appreciated the reminder of the political context and the potential for backlash.

Dr. Richardson thanked HDS for the robust discussion, much of which will lead to action items.

Updates on Training/Professional Development Recommendation

Julio Dicent-Taillepierre, MS (Public Health Analyst, Team Leader, Initiatives and Partnerships Unit, OMHHE, CDC/ATSDR) provided HDS with an update on OMHHE's activities regarding HDS recommendation 6, which addresses the need for training and professional development, particularly the CUPS pipeline program.

CUPS was first funded in 2011. It is based on a 20-year history of running such programs. The program was enhanced in a number of ways and has two goals, which are to: 1) increase the diversity of the undergraduate and graduate pool interested in public health; and 2) increase supports for enhanced academic and professional achievement among undergraduate and graduate students. The program began development in 2009, with consultation across the agency and evaluation of the 20 years of similar programs. The Funding Opportunity Announcement (FOA) was created after significant consultation with Dr. Liburd and HDS as well. OMHHE constructed a logic model and developed an evaluation framework, which was tested with the grantees. From the beginning, the process was participatory with the four grantees: Columbia University, Kennedy Krieger Institute (KKI), Morehouse College, and University of Michigan. KKI also manages the James A. Ferguson Infectious Disease Fellowship through supplemental grants. Morehouse provides administrative support for the participatory process.

The program components relate to the program objectives, which are to:

- Recruit up to 1000 diverse undergraduate students and 100 graduate students over 5 years. "Diverse" refers not only to racial and ethnic categories, but also to other demographic categories such as low socioeconomic status (SES), disability, sexual orientation, and geographic isolation. The FOA intentionally focused on increasing access to under-represented students who normally would not have an opportunity to apply or may not have considered public health as a viable career.

- Expose students earlier to the field of public health, focusing on students who have not completed an undergraduate degree.

- Provide a field practicum in a public health setting, such as in a hospital, health department, community-based organization, or academic institution.

- Provide on-going support and assistance after the summer experience.

The intent of CUPS is to take students at different points in their educational trajectories. Students who have already done significant work, but may be aiming toward a career in medicine, are engaged and encouraged to consider how public health and allied health fields could be viable options. Students who are still unsure may need additional experience to build their confidence and their ability to see themselves in a public health setting. Students who are early in their undergraduate careers and do not know what they want to pursue are exposed to the field of public health and allied medicine.

The program includes the requirement that all four grantees recruit across a variety of sociodemographic characteristics, not just by promoting the program, but also by building partners at the state and local level across the US. For instance, the program focuses on increasing representation from American Indian and Alaska Native (AI / AN) students, Native Hawaiians and Pacific Islanders, students in Guam and Puerto Rico, rural students, students with disabilities, and others.

CUPS addresses concerns regarding a lack of clarity in terms of CDC's legacy in contributing to the public health workforce and how CDC's programs fit into a workforce pipeline. OMHHE is in ongoing conversations with the Office of Public Health Preparedness and Response (OPHPR) and the Center for Surveillance, Epidemiology and Laboratory Services (CSELS) regarding collaborating across CDC programs to make contributions to the public health workforce and to efforts to prepare students, emerging leaders, and fellows across the country to consider not only CDC, but also the field of public health. For instance, the Disease Detectives program targets elementary and high school students through their teachers. The Public health Leadership and Learning Undergraduate Student Success (PLLUSS) program, administered by KKI, works at the college level - as CUPS does - but PLLUSS is a year-long program. The James A. Ferguson Infectious Disease Fellowship works with graduate and doctoral students and focuses on research. All of these programs can serve as feeder programs for CDC's Public Health Associates Program (PHAP) and the Epidemic Intelligence Service (EIS), helping students become competitive in applying for them.

There have been challenges associated with operational aspects of CUPS. When the program began in 2011, there was very little literature available regarding operational challenges and costs associated with such programs. Most of the literature focused on benefits for and successes of individual students, not on what the program does and how it builds skills and capacity so that students are better-trained and better-prepared for effective public health practice and research. OMHHE has collaborated with the CUPS grantees to understand how they systematically run the programs in terms of costs, in-kind resources, and the challenges of increasing access, particularly for students who are geographically isolated. A significant barrier with populations such as AI / AN, Native Hawaiians, Pacific Islanders, and students with disabilities has been travel to CDC at the beginning of the program. This barrier is significant for students who have never traveled far from home or who have never traveled on an airplane. Some families did not provide parental consent. One student with a disability could participate in the program only if a parent accompanied her. The operational implications of creating access for some students are significant.

CUPS has an evidence-based approach. Since its outset, the program has operated within an evaluation framework. The first five years are the formative phase of the project. OMHHE has been confirming and validating the evaluation variables and data from the grantees. There are twice-yearly in-person consultations and quarterly conference calls. OMHHE has built internal capacity to support the evaluation design. An electronic reporting and data analytic system has been created for use by OMHHE and the grantees, building their capacity for process evaluation as they face seminal and dynamic requests for data and systematic evaluation. There have been discussions about potential publication of collaborative projects.

Because of the data submitted by the grantees, OMHHE is able to track the students that CUPS is engaging. The data incorporates racial and ethnic characteristics as well as qualitative information, including students who self-disclose as LGBT, students with disabilities, and students with issues regarding geographic or cultural isolation. That level of detail is shared with the grantees to fuel discussions regarding how to create a space that ensures diversity and inclusion not only in the selection

of students, but also in the types of projects that they are assigned. Feedback from students and mentors is shared with CDC to help shape projects that make minority health or diversity inclusion relevant. The student participants are diverse, and their projects take on complex issues as well. This dynamic also challenges mentors within the agency to think deeply about how to make projects meaningful for students so that they see themselves in the project or work within a community with which they feel affinity.

In the past three years, OMHHE is exploring ways to deepen projects that occur outside of CDC. Only about 20% of CUPS students are placed at CDC. The remaining participants are placed elsewhere across the US. CDC Centers, Institutes, and Offices (CIOs) are encouraged to think about how to assist grantees in building relationships with state and local health departments and tribal health centers for student placement and to mitigate access issues. In the future, some orientation may be conducted remotely and to foster work in local areas.

Discussion Points

Dr. Warne commended OMHHE on the CUPS programming and outreach. He asked whether tribal health departments and sites are available for CUPS students.

Mr. Dicent-Taillepierre answered that such sites are available in some limited cases. Each grantee brings existing resources, strategies, and relationships. In some cases, they have also built additional relationships. The grantees operate differently. For example, one grantee incorporated a tribal health center as a sub-grantee, funding them to participate in the full implementation of the program. Another grantee is building on an existing relationship with the Tribal Council in the geographic area and interacts actively with them.

Dr. Garza asked about what the "other" category in the breakdown of racial and ethnic groups represents.

Mr. Dicent-Taillepierre replied that the program is still examining drivers of differences in diversity and inclusion per year. The data all come from self-disclosure and in some years, students have been more reticent to self-identify a race or ethnicity. The ways in which grantees collect data on racial and ethnic categories have also changed, either because of staffing changes or the use of different data sources. In the last two and a half years, OMHHE has asked grantees to collect information in a more consistent fashion and to communicate to the students that there are no risks or benefits associated with self-disclosure of a racial or ethnic category. For instance, a survey conducted after the program orientation includes a question on race and ethnicity. Some students disclose a different race or ethnicity when they are in the program from when they applied to the program. Students indicate initial concerns that the program quality and rigor may be lower because it seeks out and engages diverse students. Those concerns are often assuaged during orientation. The response rates are high, but the patterns are different. Some students categorize themselves based on multiple races and may classify themselves as "other."

Regarding the process evaluation on recruitment, Dr. Garza commented that as she teaches undergraduate students, she has observed more and more students coming from two-year community colleges who are not aware of public health. She expressed hope that CUPS could capture this audience of students.

Mr. Dicent-Taillepierre said that this issue has arisen in conversation. The CUPS program requires students to have completed at least two years at an accredited college, a community college, or a four-year college. The grantees questioned this choice initially, and OMHHE reiterated the need to increase access. The program focuses not on students who are already pursuing public health, but on students who may need extra encouragement. At the conclusion of the program, there is a commitment to follow and support the students for an additional 18 months.

Mr. Fukuzawa noted that the evaluation will be useful to determine whether the program encourages more careers in public health. He asked whether there is literature regarding why people choose public health. Kresge just hired its first post-grad fellow, having recruited from schools of public health and urban planning. When the candidates for the fellowship were asked about why they chose public health, many indicated that someone close to them was in the medical world.

Mr. Dicent-Taillepierre answered that OMHHE has conducted repeated literature reviews regarding public health training and fellowship and pipeline programs. Little literature is available and the data are not deep. The literature tends to focus on medicine and healthcare. OMHHE has initiated a relationship with the Association of American Medical Colleges (AAMC) on this topic. AAMC is also seeking to recruit students from two-year community colleges. There is also interest from the field of nursing. CUPS students are asked about their motivations for pursuing public health at their initial, mid-year, exit, and follow-up interviews.

Regarding two-year community colleges, Ms. Wilson participated in a recent meeting of the Commission to End Health Care Disparities (CEHCD), which included a presentation that addressed the likelihood of community college students being admitted to medical school. The numbers were poor due to disdain. Perhaps students who receive a free education at a community college are at a disadvantage. She supported the idea of CUPS ensuring that the students' projects are substantives. Often, intern projects are "business as usual" and do not have a health equity component.

Mr. Dicent-Taillepierre was surprised at the cultural bias related to community college students. Even the CUPS grantees pushed back on the two-year expectation. There was also pushback regarding grade point average (GPA) requirements. The discussions are ongoing. The grantees proposed the "3E model" of exposure, experience, and engagement in order to create a logical and evidence-based rationale for accepting students into CUPS. There have also been many discussions regarding what qualifies as a "health equity project" and the indicators of such a project. Potential mentors express interest in participating, but they may not understand what an appropriate project might be. An internal mentorship training curriculum for CDC staff could help.

Regarding the GPA issue, Ms. Wilson observed that an applicant could have a 4.0, but not be active. Many of the students who CUPS seeks to engage are not only going to school, but also are working, caring for family, and attending to other responsibilities. A holistic approach to CUPS will take these factors into account and reward the students for their efforts.

Dr. Lichtveld asked whether the cooperative agreement will be extended.

Mr. Dicent-Taillepierre answered that there will be an extension. A limited eligibility announcement will be published for five more years. OMHHE hopes that the evidence from the program will be presented nationally so that the definitions of a "health equity-relevant" program and "diversity" are established.

Students should be engaged in community settings. There has been some pushback regarding the relevance of this work, so it is important that CUPS has ample evidence to support its positions.

Dr. Lichtveld shared details regarding Tulane's Emerging Scholars Environmental Health Sciences Academy Program. High school juniors and seniors from public and charter schools in New Orleans and the surrounding area are recruited in a yearlong effort. Teachers must be engaged in order for the recruitment to be successful, so a separate workshop is held for teachers. Additionally, the program provides funds to teachers to equip their laboratories. Representatives from the program conduct joint lessons with teachers and evaluate the teachers. The admission process has three rounds. Applicants submit a goal statement, they have a telephone interview, and there is a personal interview with their parents. The program has a team of mentors, with 5% of faculty members' salary paid by the program. Student mentors are linked to the faculty mentors and the program participants. The two-month program immerses students either in a laboratory or in a community laboratory. The first two weeks are joint learning, and then the students complete individual research projects that are presented to an audience of teachers, parents, and supporters at the end of the program. The program supports their attendance to present at national conferences, where they have won awards. The program then tracks the students to their colleges. When OMHHE has the opportunity to revise the content of the cooperative agreement, it should be remembered that a high level of effort is required in order to make the program sustainable.

Dr. Ro said she wished that her public health department had the ability to provide that kind of support and mentorship to the public health workforce. It is difficult to make that commitment in a resource-strained environment. She appreciates that the CUPS program incorporates an introduction to CDC. She strongly encouraged that all students should have a chance to hear from, and engage with, governmental public health or public sector public health. There are valuable public health efforts and partners beyond the health department. There are many exciting opportunities for careers in public health beyond healthcare-focused areas. For instance, there are public health sanitariums, restaurant inspections, emergency medical services in some areas, and emergency preparedness. The health equity lens is critical in all areas. A number of undergraduate public health programs have begun across the nation. It is challenging to match these graduates who have been inspired to work with and for the community, with the reality of employment options. Students must understand that entering public health perhaps in an administrative position to learn about programs, services, and systems will help them move upward. It is important not to set expectations that cannot be met. A career in public health is a marathon. There is an impending wave of retirements in the public sector of public health, and there is a great deal of competition from the healthcare sector for people to fill those positions. Anything that CUPS or any CDC program can do to introduce people to the public sector and governmental public health will be beneficial.

Dr. Liburd agreed that it is important to be transparent with students, who may enter the job market with a significant loan burden and are seeking a certain salary. Their faculty mentors may encourage them to apply for a federal position rather than a local position. They may view their training as preparing them, more than their experience. At times, credentials are over-valued and experience is under-valued. Both are needed in the marketplace. The realities of the marketplace should be made clear so that students have a better sense of what they need to do and the time that they need to invest in order to be on a particular trajectory. One student shared with Dr. Liburd the observation that while these students want to be in the community and on the "front lines of social change," they feel that in order to do that they have to take a vow of poverty, which becomes a disincentive. These conversations are important to have. It is important to engage more deeply with faculty and groups such the

Association of Schools and Programs of Public Health (ASPPH) and AAMC. When 16,000 students apply for 200 positions in CUPS and 4000 students apply for PHAP but some positions in public health cannot be filled, there is a disconnect.

Dr. Will Ross commented on the logic model, particularly the short-term outcomes of knowledge of public health concepts. He asked how students' knowledge is assessed.

Mr. Dicent-Taillepierre replied that the assessments vary. OMHHE is working toward a common assessment across the four grantees. The assessment should competency-based and based on the competencies released by ASPPH in June 2012. There have been operational challenges, however. The four grantee institutions do not teach the same courses and do not evaluate them the same way. The teachers are volunteers, and they teach what they want to teach. The grantees are not accustomed to answering questions about content. CDC does not want to be proscriptive. Their interest is to be rigorous. They are building relationships of trust and transparency over time.

Updates on Training & Professional Development Recommendation

Domenica Nino, MPH (Presidential Management Fellow, OMHHE, CDC / ATSDR) described the recent Millennial Health Leaders Summit. The summit is a two-day intensive training for graduate nursing and medical students on vital health equity topics. The students undertake a variety of activities, including workshops and case studies. The summit equips the students with the necessary tools to serve as future health equity leaders.

The summit is in its third year. The Millennial Health Leaders Summit Advising Committee was convened to organize the summit. The committee includes representation from four institutions: UNC, Brown, Princeton, and CDC. They help to craft an agenda for the summit so that the students will have a valuable experience.

A total of 52 students attended this year's summit, representing 21 schools. Participants are recruited via communication with partners and institutions that have previously been interested in the summit. Advising Committee members then followed up with the institutions' deans, as participants were nominated, selected, and funded by the deans. After this stage of recruitment, only 34 students were recruited. The program goal was to have 50 to 60 students attend the summit, so the application process was opened to additional schools through an ASPPH newsletter announcement.

The two days of the summit included an introduction and welcome from CDC Principal Deputy Director Dr. Anne Schuchat and Dr. Liburd; workshops with a mix of lectures and activities and a networking reception on the first day; and case studies with smaller groups engaging in in-depth work on different topics with a CDC expert on the second day. The topics included social media, intimate partner violence (IPV), sexually transmitted infections (STIs), tobacco, career training, and the *MMWR* on Integrated Strategies with different types of CDC research. Also on the second day was a career fair. The students particularly enjoyed the networking reception, which was supported by the CDC Foundation and was held at Marlow's Tavern.

The summit agenda was crafted around certain objectives, and students completed evaluations rating the objectives on a scale of 1 to 5. The highest-rated objective was, "I can demonstrate the importance of cross-collaboration in reducing health disparities." The lowest-rated objective was, "I am more familiar with federal career opportunities in the field of public health." It should be noted that the

students completed the evaluations before they attended the career fair, which was held at the end of the summit.

The summit included a variety of presentations. The highest-rated presentation was a workshop on "power building to advance health equity." The workshop included two speakers from the WISDOM program in Wisconsin, a grassroots, nonprofit group that promotes alternatives to incarceration. One of the speakers had gone through the program and shared a powerful story that connected with the students. The students also ranked the case studies highly since they were smaller, more interactive, and engaging.

The lower-rated presentations included "Health Equity 101." This presentation provided a basic overview, given that not all students were experts in public health. Some of the students attending the summit already had a strong foundation in health equity and disparities. Overall, most students (96%) indicated that they would recommend the summit to a colleague and most participants (94%) indicated that the summit met their expectations.

OMHHE analyzed themes that emerged in the qualitative aspect of the surveys. The themes of what students learned included:

- Community focus
- Power in grassroots organizing
- Social media
- Collaboration
- Leadership values
- Built environment
- Urban planning

One student wrote, "I learned that leadership can be interpreted in different ways by people, but it's important to determine what leadership means to us and what values we want to practice."

In response to a question regarding how students will use the information from the summit and what they will take back to the community, the following themes emerged:

- Getting more involved with the community
- Participating with community-based organizations
- Going to Town Hall meetings
- Being more collaborative with people outside their field
- Presenting, training, and sharing with students at their institution
- Incorporating it into research or dissertation

One student wrote, "I'm going to be a scientist who does not only care about data, but cares about the life, family, and community of the subjects in the data."

The survey asked for suggestions for improving next year's summit. Many students requested more time. They wanted to be at CDC longer and to have more time to network with speakers. Sessions were often scheduled back-to-back. In the future, the agenda will build in time for interaction with speakers. Students also expressed desire to delve deeper into the issues and strategies for finding solutions. One

student wrote, "I would like to have more of a think tank-style of discussion about solutions and how the next generation of public health leaders can have the greatest impact in addressing health disparities."

Programs such as the Millennial Health Leaders Summit can help build a pipeline for the public health workforce and show the diversity and competency of a future workforce that is well-versed in health equity. Steps for the future are to:

- Expand the program to bring more students: a potential barrier is that schools select and fund the participants, and schools have different levels of funding available
- Begin the recruitment process earlier and make the program available to all students in the US
- Make the application more competitive, including having the manpower to review all applications
- Increase funding so that the program can invite speakers from all over the US, not just from CDC or Georgia to bring variety to the agenda

Discussion Points

Ms. Wilson expressed surprise at the relatively low rating of the "Health Equity 101" session. She wondered whether students came to the summit thinking that they knew everything they need to know about health equity. If the medical and nursing students believe that their curricula cover health equity, they may not be receptive to learning more about the field.

Ms. Nino said that the students wanted to delve deeper into the issues, but it was important that the agenda provide a foundation on health equity so that the students would be of the same mindset.

Dr. Richardson said that in her experience, students do not always like what is good for them. She suggested that the agenda should not change based solely on the student feedback.

Dr. Laura Ross noted that the session received a good score, but it was low compared to the other sessions.

Dr. Warne said that the Association of Accredited Public Health Programs (AAPHP) tends to include smaller programs with more minority students. They could be a good partner for recruitment.

Health Disparities and Environmental Justice

Patrick N. Breysse, PhD, CIH (Director, National Center for Environmental Health (NCEH) / ATSDR) addressed HDS regarding the Flint, Michigan water crisis and described how NCEH and ATSDR address health disparities and environmental justice issues. He has served as Director for less than a year, having come from a career in academia, focused on asthma and asthma risk factors in inner-city environments. This position offers the opportunity to get closer to the real world and to improve people's lives and health. The job has been a whirlwind.

ATSDR is not a well-known agency. It was created 35 years ago to serve as the health component of the hazardous waste investigations conducted by the US Environmental Protection Agency (EPA) at sites that require clean-up. There are often environmental justice and health disparity issues associated with this work.

The water crisis in Flint, Michigan has garnered a great deal of attention. The US Senate passed a bill to bring additional resources to the community that are sorely needed. The crisis began in April 2014 when the City of Flint changed from the Detroit water system to drawing water from the Flint River and treating it themselves in an effort to save money. The water was not treated properly, and there have been a number of problems as a result. The water leaving the water treatment plant was acceptable. The problems occurred in the water distribution system, where there was a lack of corrosion control due to a great deal of organic matter that was released, resulting in under-chlorination and a brief boil water advisory; a subsequent over-chlorination; and excess lead.

In August 2015, a Flint pediatrician published a paper on the lead trends data from the Hurley Medical Systems that showed a spike in child blood lead levels (BLLs). CDC became involved in September 2015 based on Congressional inquiries. CDC must be invited to assist in situations and had monitored the situation in Flint, but did not become formally involved until Congress requested them. CDC became drastically involved in December of 2015 with the Emergency Declaration, which mobilized the federal government.

The EOC in Flint is administered by the HHS Assistant Secretary for Preparedness and Response (ASPR) and includes CDC, EPA, the US Department of Housing and Urban Development (HUD), and other parts of the federal government. The situation is not a classic emergency, such as would be associated with a toxic spill. The immediate emergency in Flint was the need to supply residents with water. President Obama gave the Federal Emergency Management Agency (FEMA) an appropriation to provide bottled water, given that the water was not safe to drink. There was some natural protection in place in that the water was discolored, tasted bad, and had an odor. While the "do not drink" order was not placed until October 2015, many residents had already stopped drinking the water.

The goals of the federal response are to:

- Provide immediate access to safe water (FEMA)
- Assure the long-term safety of the water supply (EPA): the current guidance is that the Flint water is safe to drink through an approved filter that is installed properly, for residents who are not less than six years old, or pregnant
- Attend to immediate needs regarding the health of the community to ameliorate the effects of lead contamination, which may have given rise to developmental defects or delays in children (HHS and Unified Command Group)
- Community resilience (HHS and Unified Command Group)

There are many levels to the problem in Flint. It is a lead problem; an environmental justice problem; a criminal justice problem; and a political problem, with the complex dimensions of state, local, and federal governmental actors. Flint is also an infrastructure problem. Congressional members and staffers have been aware that the US infrastructure needs investment, but they may not have realized

that the infrastructure issues lead to health problems and represent more than waste. Some Congressional staffers did not realize that some US cities still utilize lead pipes. In some areas, the infrastructure is so old that some water mains are still made of wood. The infrastructure problem is tied to issues of environmental justice and equity, as much of the aging infrastructure is in older cities and in inner-city environments with communities of color, many of which struggle with poverty.

CDC and ATSDR have contributed to the Flint response in the following ways, taking the lead on the health component of the multi-agency response with the Childhood Lead Prevention Program:

- Providing guidance and a plan for monitoring children with elevated blood lead levels. Elevated BLLs are currently defined as greater than 5mcg/dL; however, there is no safe level of lead in blood.

- Identifying and linking community members to case management. ATSDR personnel visit homes to talk with parents regarding potential sources of lead, including paint and soil in addition to water. If the BLLs are high and require clinical intervention, the case management team facilitates that intervention. If the levels are not as high, steps are taken to bring the levels below 5 mcg/dcL.

- Coordinating health messaging with EPA, HUD, and other groups so that communities do not receive mixed messages.

- Assessing chemical exposure of the community. There have been concerns about bathing. Early in the crisis, the water was corrosive and lead to rashes. The subsequent over-chlorination led to additional skin problems. These skin problems persist even after Flint returned to the Detroit water system, and it is not clear why. ATSDR is coordinating with the state to determine the source of the problems.

- Identifying long-term community needs. It recognized that the children who were impacted by lead are followed over time and have appropriate intervention opportunities, such as improved diet, improved early education opportunities, assistance with behavioral issues, and other services. There is a long-term assessment planned to identify the affected children and to ensure that they are linked to the necessary services.

NCEH / ATSDR adopted CDC's definition of health disparities, which is "Differences in health outcomes and their determinants among segments of the population as defined by social, demographic, environmental, or geographic category."

The agency addresses health disparities and environmental justice in many ways and in nearly all of its activities. The challenge is to acknowledge the importance of health disparities and to make them a purposeful focus rather than a byproduct. The agency impacts SDOH in a number of ways:

- Healthy Homes and Childhood Lead Poisoning Prevention Program: The risk for elevated BLLs is overwhelmingly in inner-city, poor populations. The program's goal is to reduce childhood lead poisoning by targeting primary prevention. The surveillance program is used to identify children at high risk so that primary prevention activities are targeted where they belong.

- Brownfields/Land Reuse Health Initiative: While ATSDR is reactive to problems with hazardous waste, there are attempts to be proactive regarding the many legacy industrial sites across the US that are burdensome to communities around them. Particularly as these sites are redeveloped, it is important that health problems are not created for communities around them. These sites are frequently in poor neighborhoods, and there is a strong environmental justice component to Brownfields.

- Task Force on Environmental Health Risk and Safety Risks to Children: This multi-agency task force has a strong environmental justice component. Aspects of the work include issues such as Flint, lead, and asthma.

ATSDR also funds an Asthma Prevention Program. One of that program's goals is to reduce the health disparities in asthma. Rates of asthma among African American children are twice the rates in other races. There are also pockets of Hispanic populations, primarily of Puerto Rican descent, with high asthma risk as well. Much is known about reducing asthma morbidity and mortality, but less is known about how to prevent asthma.

ATSDR conducts Community Health Investigations at hazardous waste sites across the country. There are currently 60 ongoing investigations, and the agency receives petitions from hundreds of sites every year. Most of the communities are disadvantaged.

As part of the Lead Prevention Program, ATSDR recommends that all children on Medicaid between the ages of 1 and 2 receive a blood lead test. Response rates differ from state to state, and many states do not screen at high enough percentages to be effective. In Louisiana, ATSDR cross-listed children in Women, Infants, and Children (WIC) clinics with children who had received blood lead tests and determined that many children in WIC had not received their test. The WIC clinic provided an opportunity to serve as a screening resource. ATSDR used this approach as a model and demonstrated that the percentages of children who receive the tests can be greatly increased by interacting with WIC clinics.

The National Asthma Control Program (NACP) targets Blacks and African Americans, as these groups have the highest rates for emergency department (ED) visits and hospitalizations due to asthma. The goal of the program is to reduce ED visits and hospitalizations by 50% among Medicaid-eligible populations in the next five years.

Dr. Breysse described a sample community investigation at a site in Philadelphia, Pennsylvania. The site was a lead paint production and lead smelting operation for 150 years, and there was a significant legacy of lead contamination in the surrounding neighborhood. ATSDR provided blood lead screening for residents, ensuring that all children under the age of 6 were tested, raised awareness, and worked with community leaders. The site is on the National Priority List (NPL), so EPA and CDC must work together on it.

From the NCEH / ATSDR perspective, the essential elements of a health disparity program are:

- Surveillance and monitoring of risk factors
- Mapping and geospatial analysis
- Policy and partnership development

- Research and evaluation
- Education and training
- Technical assistance and services for communities

The ATSDR geospatial mapping group created the Social Vulnerability Index (SVI). The index was originally established to aid in planning for disaster response, when it is important to understand where disadvantages communities are and their capabilities and vulnerabilities. The SVI has been used more broadly to define other aspects of poverty or other social vulnerabilities that can be mapped and defined to consider environmental risks. The index is available on the Internet for public access.

ATSDR'S infrastructure for addressing health equity includes a senior leader serving as the Diversity and Inclusion Officer in the Office of the Director (OD). A Division Director serves as liaison, subject matter expert (SME), and key NCEH / ATSDR representative on federally-related workgroups and taskforces. The Diversity Officer leads the newly-established Diversity and Inclusion Workgroup. They meet regularly and meet with the Director twice per year.

There are challenges regarding infrastructure needs and support for health equity at ATSDR. Environmental justice and environmental equity are part of almost everything that the agency does, but they do not necessarily focus on these. The focus on health equity should be maintained, and sites with larger health equity issues should be prioritized. The new Diversity and Inclusion Workgroup is working to create the agency's strategic, overarching approach to ensure that health equity is intentional, integral, and in the forefront rather than being a casual part of what they do. A 1994 Executive Order issued by President Clinton mandated that all federal agencies achieve environmental justice as part of their mission. This policy is the basis for building ATSDR's programs.

ATSDR has added language to its FOA indicating that funded work should focus on SDOH, including communities that are disproportionately affected by public health problems. Further, the FOA language notes that activities should include the elimination or reduction of health disparities as a goal.

- Regarding training programs, a number of ATSDR's programs include diversity of trainees, including:

- Environmental Health Training in Emergency Response (EHTER), which is part of CDC University and includes ideas for using the SVI to target efforts toward vulnerable populations

- Childhood Lead Poisoning Prevention Training for state and local grantees

- Vector Control Training to state and local environmental health practitioners, which is receiving more attention due to the Zika virus concern; vector control issues affect certain populations disproportionately.

Discussion Points

Dr. Ro appreciated the conversation about infrastructure, as public infrastructure has a great deal of implications for public health needs. Where she lives, lead has been found in pipes in schools. She wondered whether efforts will be conducted not only in Flint, but also in all communities when lead is discovered.

Dr. Breysse replied that resources are necessary to have a national response. Congress needs to understand what needs to be done and what is needed to accomplish it. There should be a national water program and a national lead program. The Senate bill that was just passed devotes some additional resources to extend the lead program, but not enough. The Flint crisis has led communities across the country to consult lead surveillance data, which shows that there are children with elevated BLLs across the country, even in newer cities. EPA regulates the systems that provide drinking water to 10,000 or more people. In a given city, EPA draws water from 10 to 15 sites and measures lead and copper levels according to the Lead and Copper Rule. The rule may not have been applied uniformly across the country and may not have been enforced. EPA is reevaluating the rule. If the rule is enforced, the systems are likely to be safe. However, the rule does not apply after water leaves the water main and enters structures, which can have lead solder, connectors, or service lines. It is important to know where these lead elements are and to inform communities about them. Investment in infrastructure may lead to improvements in water distribution systems, which are a national problem.

Dr. Ross said that in his home, the lead rates are also high. The Lead Copper Rule is a "universal precautions" approach. In instances of reduced resources and resource allocation, efforts may need to be targeted to high-risk areas. In order to do so, it is necessary to map communities and their risk to match them with funding that is commensurate with reduction of lead rates. Further, he noted that given that there is no safe BLL, he wondered why the level is not zero.

Dr. Breysse said that the National Health and Nutrition Examination Survey (NHANES) establishes population-based levels of many things, including lead, which was the first chemical added to NHANES. The survey produces a population-weighted distribution of BLLs across the country. Everyone has lead in their systems as a historical legacy. Lead mobilizes in the bones and naturally leaches out with age and when a woman is pregnant. The approach to lowering BLLs over time cannot set a limit of zero, because it is not possible to reach zero until everyone who is alive now dies and lead is eliminated from the environment. Therefore, the approach is targeted toward populations at highest risk. The level of 5 mcg/dcL came about because it represents the 97.5 percentile of the blood lead distribution; that is, 2.5% of the American population has a BLL of greater than 5 mcg/dcL. In the past, 2.5% of the population had a level of greater than 10 mcg/dcL. Efforts to lower levels when the threshold was 10 mcg/dcL were successful, because the level can now be reduced to 5. With this approach, the distribution will shift lower and lower. The most recent NHANES data will be reviewed to determine whether a new threshold should be established. This approach also has an analytic sensitivity issue, as most laboratories can detect approximately 3 mcg/dcL reliably.

Dr. Lichtveld said that in the mid and late 1980s, there was a reduced lead program at NCHS, with outreach at the local level. The program took high-risk populations into account and acted accordingly. It is not necessary to conduct more analysis to know where action should be prioritized. For instance, she knows the high-risk communities in her area because of many of their characteristics. The Flint situation is a wake-up call, but there are many other "Flints" nationwide. With its current budget, there is not much that ATSDR can do.

Mr. Fukuzawa asked about coordination with EPA.

Dr. Breysse answered that ATSDR has staff co-located with EPA in all 10 HHS regions. ATSDR does not work in hazardous waste sites without partnering with EPA. ATSDR was established to serve as a health component partner to EPA.

Regarding the NACP, Dr. Ro observed that in her area, the state and local health departments do not have a funded asthma program. The only way to sustain their asthma work is through research grants. The evidence base supports the return on investment of the Healthy Homes Asthma program, but it is not a sustainable part of what the health department provides. Children and adults with uncontrolled asthma tend to be low-income and/or people of color. She wondered how to bring this program to scale and maintain it, especially given that it is evidence-based.

Dr. Lichtveld conducts her research in WIC clinics in Louisiana. The BLLs in the mothers are elevated. Her study followed their children for up to 36 months, and the children are showing diminished early development. Environmental health is often hindered by a lack of data, but in this case, transgenerational data are available. Additional data are not needed to take action in this area.

Dr. Breysse noted that the National Asthma Program does not fund all states and is not truly national in scale. He hopes for resources for truly national programs. CDC has an initiative regarding diseases that the healthcare system can be leveraged to support. Asthma is one of those diseases. There is a significant return on investment associated with asthma programs. Especially given the Affordable Care Act (ACA), the healthcare community should support them.

Dr. Ro noted that there should be partnership with the Centers for Medicare and Medicaid Services (CMS).

Mr. Fukuzawa agreed and asked about interagency collaboration with HUD regarding healthy housing.

Dr. Breysse said that ATSDR used to have an aggressive Lead and Healthy Housing Program that worked with the Asthma Program. Some years ago, the programs were consolidated into a single program. The combined resources were not the same, however, and they experienced a budget cut. The asthma community advocated for its funding, but in 2012, the ATSDR Lead Healthy Housing funding was nearly eliminated from the budget. It has just been restored. He hopes to return to the previous model. ATSDR works closely with HUD on these issues.

Regarding the investigation in Philadelphia, Dr. Ro asked why the Occupational Safety and Health Administration (OSHA) was not included on the list of collaborating agencies responding to the issue.

Dr. Breysse answered that the hazard was a community exposure versus a work exposure concern. OSHA sets guidelines and regulations for personal protection needed by workers at hazardous sites.

Dr. Ro said that there is a smelter in her area that is an environmental concern. In addition, gun ranges are a concern and their cleanup is problematic. It is primarily people of color who serve as cleanup workers. They then bring lead home and expose their families.

Mr. Fukuzawa asked whether the SVI has been applied to extreme weather events. Presumably, a researcher could use that information to map climate vulnerability.

Dr. Breysse concurred and described ATSDR's program on climate adaptation. Some funded programs overlay social vulnerability with extreme heat days, for example, to learn where outreach is needed. Data are not available on the presence or absence of air conditioning, but there are strong correlates of having air conditioning, so it is possible to discover communities that do not have air conditioning and might not be able to cope with extreme heat days.

Ms. Thompson thanked Dr. Breysse and commented on lessons learned and corrective actions. She wondered whether a national policy could be enacted that would not allow a mayor or governor to make decisions regarding redirecting water; that is, should there not have been a higher level of regulation or policy to add accountability that would not have allowed the situation in Flint to occur?

Dr. Breysse sympathized with her frustrations. The series of decisions were poor, such as utilizing the Flint River for water and putting critical infrastructure and lives at risk in an attempt to save money. The issue is also political. Political leaders should know that they will be held responsible for their decisions.

Dr. Warne noted that the governor of Michigan unilaterally stated that he would appoint City Managers in place of elected officials. It is clear that such a level of decision-making can result in public health crises. He asked about the recent spill caused by EPA of toxic waste into a river that flows into the Navajo Nation.

Dr. Breysse responded that ATSDR was involved in the response to that spill, and he recently visited the site. There is a legacy of mining in Colorado and Northern New México that is polluting the water every day. The mines fill with water, and the water leaches contaminants out of the mine. When the water level rises, the contaminated water trickles into the river system. In this case, a berm was built to hold the water back. An EPA contractor came to install a pipe to drain the contaminated water away, but the berm was not structurally intact and broke. All of the water that had purposefully been held back was flushed into the river system. The issue, like other instances of toxic spills, is complicated. There is significant recreational value to the land, and there has been political reluctance to declare the sites hazardous waste sites. When the sites have been declared hazardous, EPA and CDC must respond to clean them up. Short of that declaration, there are negotiations regarding what EPA and CDC can and cannot do. ATSDR tries to work closely with the Navajo Nation to address the broader water contamination issues from the legacy of mining in the area.

Dr. Ro asked about ATSDR's efforts regarding workforce diversity. In her work in chronic disease, the Community Health Worker (CHW) and promotora models present additional opportunities to consider environmental conditions by working directly with families as well as with the community at large. There are opportunities for affected individuals and youth in communities to grow up to become professionals that improve understanding of impacts and help drive policy and decision-making.

Dr. Breysse said that CDC is committed to having a diverse workforce, and he is personally committed to it. He agreed that when the agency responds to a community, there are opportunities to hire community members to build education opportunities as well as potential future workforce. In his asthma work in Baltimore City, all of the home visitors were community members that the program hired and trained. The program would not have been successful without those workers, because "you have to look like the community to understand the community" and to reach out. They are utilizing the same approach in Flint as they work to build long-term follow-up programs. The communities need resources to hire staff.

In the area of environmental health, Dr. Lichtveld described training CHWs as environmental interventionists, imbedding them into the community. CHWs have also been successful as disaster interventionists. In addition, partners are funded using the community-based participatory research (CBPR) method. The community-based organizations (CBOs) become research partners, and the CHWs receive competency-based certification and training and also become research partners.

Dr. Breysse added that when ATSDR is in a community, they often recruit a Community Assistance Panel. This panel provides support and background to the agency. Camp LeJeune, a Marine base in North Carolina, has been investigated for years and has had an active panel.

Dr. Horner-Johnson's focus area is the health of people with disabilities. Given the developmental implications for infants and children impacted by lead, she asked about ATSDR's interactions with the National Center for Birth Defects and Developmental Disabilities (NCBDDD) regarding monitoring and providing services.

Dr. Breysse said that ATSDR does not interact with NCBDDD as much as it should, and he has recently begun to initiate those interactions. There are dozens of known developmental toxins in the environment. US children are faced with a plethora of developmental challenges from chemicals in their environment. The problem does not need a chemical-by-chemical approach, but rather a means for developing resiliency that is in most central nervous systems to help children overcome the risk factors and to have a broader perspective on the issues.

Dr. Richardson thanked Dr. Breysse for the conversation. She offered the assistance of HDS and its members as ATSDR expands and pursues disparity and environmental justice initiatives.

Dr. Breysse hopes to engage HDS further for advice regarding how to make disparities an integral part of ATSDR's work rather than a byproduct of the work. ATSDR is in disadvantaged communities every day, and they should have a different perspective for their work.

Dr. Richardson said that HDS would discuss the practice of public health equity and could reconnect with him regarding those ideas for integrating equity into all of public health practice.

HDS Updates/Feedback

Dr. Liburd thanked HDS for the day's conversation. HDS has diverse representation from academia, national organizations and foundations, departments of public health, and health systems. OMHHE seeks to ensure that the office's direction and priorities are keeping pace with other national initiatives, efforts, and directions. With broad input from HDS, OMHHE can identify precisely how its work and resources compliment and do not duplicate important national work.

2016 is a transition year because it is an election year. A new administration will be in place at this time next year. It is important for OMHHE to be clear about the value that it adds and demonstrate that its direction will produce the needed attention and action.

It has been noted that HDS tends to "bite off too much and not follow through." The group makes many commitments when it meets, and OMHHE can take more responsibility for facilitating follow-through. The office seeks a person who will spend at least 50% time with HDS, identifying priorities from the meeting minutes, convening meetings, and facilitating contacts with other federal agencies.

In the past, HDS has requested information about the operational workings of OMHHE and how resources are utilized. Dr. Liburd expressed hope that the day's presentation had provided the desired information. OMHHE gets strong support from its sister CIOs, financially as well as with personnel detailed for specific projects. The meeting with representatives from state, local, tribal, and territorial

offices of minority health was possible because five national centers at CDC contributed resources. The HDS interactions with Center Directors help foster these relationships, and it is important to work with their staff to follow up on the presentations.

As they look to the rest of 2016, Dr. Liburd hoped that HDS would help focus OMHHE to assist with the upcoming transition. She further asked HDS for specific recommendations that can proactively build on efforts to accelerate the office and its mission so that OMHHE begins the next year in a focused, proactive manner, continuing to pursue the HDS recommendations.

Typically, governmental departments of public health have not established and institutionalized a health equity practice. In a related point, if health equity can be infused throughout CDC, then they will be better able to infuse health equity throughout states, localities, and partners, as well as inform conversations with policymakers. She asked for feedback from HDS on these points as well as other potential directions.

Discussion Points

Dr. Richardson charged the subcommittee members to provide specific suggestions for action items. She emphasized that many of the issues that they have discussed are important, and a great deal of work remains to be done. Therefore, they need to create a work plan.

Dr. Warne asked for clarification regarding HDS's role and whether they can advise CDC CIOs directly in addition to advising ACD.

Dr. Richardson said that the two ideas are related. HDS recommendations from ACD go directly to the CDC Director. They then are shared with the CIOs for adoption, and OMHHE works across the agency to implement them. HDS recommendations to ACD are specifically internal to CDC and under CDC's control. She said she hoped that some elements of the day's discussion could inform action items to create recommendations for ACD at its Fall 2016 meeting.

Dr. Warne noted that Indian Country faces challenges associated with evidence-based practices. A program may work effectively in one setting, but may not apply in South Dakota. He hoped for a stronger effort from CDC to increase resources in order to formally evaluate programs in the most vulnerable and underserved populations, including tribal populations, in order to build the evidence base.

Regarding infusing a health disparities perspective, Dr. Horner-Johnson asked how to "give that some teeth." HDS can raise awareness, but there should be requirements to which centers can be held accountable.

Dr. Liburd answered that the CIOs have their own constituents and Congressional mandates. There are mechanisms within the agency, such as the FOA template, where OMHHE can work with CIOs and clarify health equity more clearly. OMHHE can provide training to project officers and supervisors, equipping internal staff to understand health equity work and to provide technical assistance. Those efforts are different from a mandate or a requirement. OMHHE works closely with SMEs to navigate the complicated issues in different areas. In this moment, public health catastrophes and epidemics are in the public eye. They should be ready to take advantage to achieve their public health mission.

Ms. Thompson suggested creating a matrix as part of a work plan to illustrate health equity values, principles, and practices and where they emerge in the range of CDC's programs. This exercise will reveal gaps as well as the programs that address basic issues such as poverty, education, housing, and economic health. The tool could also lead to the development of strategies to infuse health equity throughout the agency and the identification of partners to help meet the needs. Ultimately, the gaps will lead to discussions regarding necessary funding and resources.

Dr. Liburd said that as a subcommittee, HDS can do this work as well as generate policy recommendations.

Mr. Fukuzawa said that even though a mandate is difficult to implement, the subcommittee should not limit itself. They should consider the most practical form for such a recommendation that will meet the path of least resistance. There is agreement that there should be an agency-wide adoption of health equity as a frame. There are options for the practical execution of the recommendation.

Dr. Richardson said that the last set of HDS recommendations started to do this work. They are now considering the next steps to move forward. The most impactful recommendations have an "actor" and an "act." For instance, "increase diversity of the workforce" is not a very actionable recommendation. HDS must set priorities. The framework for action that was requested in the initial set of recommendations has been developed and expanded upon, and the health equity practice can be wrapped around that framework. The two themes that emerged from this meeting follow:

- HDS can make a recommendation regarding variables and the ways in which CDC collects its data and conducts its national surveys. English is the most impactful metric in terms of health outcomes. Why does NHANES not ask about language preference? A conversation with NCHS may be warranted as this recommendation is developed.

- HDS has discussed workforce issues a great deal. The subcommittee could address the expansion of programs, especially when more evidence is available regarding CUPS. An HDS workgroup could be convened to work with Dr. Penman-Aguilar and her group regarding the development of the workforce diversity health equity indicator.

Additionally, she encouraged HDS members to think about what they can do outside the agency to move the work of OMHHE forward and how they can build strategic partnerships that add value.

Dr. Garza agreed that there are "building blocks" for institutionalizing health equity. Their next steps are to bring those blocks together. What are we doing in our own respective institutions? It would be ideal for CDC to serve as the model for institutionalizing health equity, but the question of her institution gives her pause. The University of Maryland is a flagship institution. When she began her time there five years ago, diversity was non-existent. In the last two years, the institution has raised the profile of diversity. Workforce development is important to her because she teaches minority health and health equity to undergraduate students. They are preparing future public health leaders, and CDC's frameworks such as the SVI can be incorporated into curricula so that students have models for health equity and understand what CDC is. For the first time, the University of Maryland is offering a Masters of Public Health degree in Health Equity through the School of Public Health. HDS convenes to offer OMHHE advice and input, and HDS members take information to their home institutions.

Dr. Ross said that three years ago, a small group from HDS was tasked with crafting the recommendations that were ultimately forwarded to ACD. The group, consisting of himself, Dr. Ro, and Bonnie Duran, still has the expanded recommendations, with a great deal of substance. The expanded text refers to ensuring that there is an evidence base for the populations being studied, for instance, as Dr. Warne had suggested. The small group also suggested that HDS members participate in workgroups formed around each of the recommendations. The full text of the report could be revisited.

Dr. Richardson said that the report could be shared with those who have joined HDS since the report was generated.

Dr. Lichtveld said that HDS needs approximately three aims, an approach to the aims, and a benchmark to measure the approach. The subcommittee is now in a phase in which questions can be answered. Initially, HDS focused on what is known currently. The subcommittee has not taken action in terms of what to do about it. Action related to health equity practice can be related to CIOs and then measured. Equally important is the component regarding what is not known. For instance, much is unknown regarding workforce. Their action agenda could incorporate prioritizing what is not known. The Hispanic Health Forum yielded three priorities. The first was to conduct a special analysis of national surveys, but the survey does not allow for sub-analyses so that questions about Hispanics can be answered. The second priority was analysis of data collection, interpretation, reporting, dissemination, and intervention. The third priority was to assess the collection of language access data in public health, clinical, and national surveys. She hoped to look at actions that cut across all CIOs so that everybody can contribute. It would make sense for ACD to support such an approach that does not burden a specific CIO. Regarding an incentive for CIOs to participate, a consultative group could be created to work directly with directors to help them apply the health equity lens. Directors can receive help translating health equity strategies and approaches to achieve an outcome. HDS could serve as that consultative body.

Dr. Liburd asked HDS to imagine what the new CDC Director might want to know about OMHHE, and what he or she might want to hear about the office's engagements.

Dr. Lichtveld replied that a new director might first want to know what the office does, and then how the office connects and integrates with the rest of CDC. For instance, it might make sense for a staff person or liaison in each CIO to be identified to work with OMHHE.

Dr. Ross agreed that the first question is likely to pertain to what OMHHE does. The second question may regard how to ensure that the work is hardwired into the institution, with each part of the agency embracing health equity such that an individual office of health equity and minority health would no longer be needed. In addition, a new director might want to know how a health equity strategy is communicated across CDC and outside to constituents.

Dr. Richardson expressed doubt that a new CDC Director would take that approach, but she agreed with the ultimate goal that health equity should be so integrated that the office is not needed. She has learned a great deal about CDC in her time on ACD and HDS. Perhaps that learning could be shared with members as they join HDS. The previous HDS recommendations addressed what the most effective format for health equity at CDC might be from a structural point of view. The next State of Health Equity at CDC Forum will address these organizational questions at the agency, CIO, and programmatic levels. These topics constitute a culture change.

Dr. Lichtveld said that a great deal of this change can be accomplished through the funding stream.

Dr. Richardson agreed and said that HDS received a tutorial on the funding stream and budgeting process, which is a complex process with Congress. To the extent possible, HDS can be helpful in identifying gaps, identifying needs, lift up specific programs as essential to moving health equity forward, and crafting a recommendation regarding resources. It is not possible to disentangle meaningfully how much of CDC's budget is devoted to health equity work. HDS's work should have a vision for moving forward, and the vision should be divided into one step at a time.

Dr. Warne said that many CDC FOAs specifically refer to how a potential project addresses HP 2020 issues. He wondered whether the FOAs also could refer to how projects address health equity. This approach would cut across all CIOs.

Dr. Richardson said that HDS convened a workgroup on imbedding health equity language into every FOA and assessing how the required information is tracked.

Dr. Liburd commented that in their conversations about health equity, collaborations, stigma, discrimination, and root causes, they are reminded that it is difficult and it takes time to work across sectors. People tend to retreat to the familiar, even when they recognize the importance of these issues. It is difficult to communicate what the office does in an "elevator speech." As the nation's demographics are changing and health officers focus on how to reduce disparities and pursue health equity, it may not have been communicated why this work is important for the entire society. How can areas that are undergoing transformations understand that pursuing health equity is good for the entire city, county, and state? The communication challenges will get the attention of people who do not devote their career to this work, and who often are in a crisis mode. The health equity work is preventive and proactive, and taking on this lens would minimize many problems.

Dr. Richardson answered that these cases have been made effectively and eloquently and could be gathered. As a subcommittee, HDS should form workgroups with deliverables and action steps to pursue. The previous framework with recommendations and workgroups did not see follow-through, as the subcommittee over-extended itself. To avoid this situation again, the group should choose two or three actions for the next 6 to 12 months and not "try to be all things to all people." One workgroup could focus on the CDC workforce diversity indicator with Dr. Penman-Aguilar. It may be too late to become meaningfully involved in the larger, national health equity indicator effort, but she would reach out to offer support to that group. Another HDS workgroup could focus on surveys in terms of how to disaggregate the larger, underrepresented groups; how information is collected about language access and ability; and other topics. Such a workgroup could make a statement about CDC's data collection and the agency's requirements of grantees that do data collection. She wondered about the status of the FOA language work, which is potentially impactful.

Dr. Liburd said that the FOA is established with health equity-related bullets. OMHHE is collaborating with the grants management office at CDC to craft more detailed guidance language so that all CIOs will know how to incorporate the language into their FOAs. This work will be accomplished this year. They have first been committed to working within the new system, called Grant Solutions, which is being installed. The guidance language will be guided by feedback from ASTHO from a recent meeting.

Dr. Richardson asked for additional suggestions for HDS workgroups. She suggested that a group could expand on the components and implementation strategy of health equity practice. This work will likely be on a longer time frame.

Mr. Fukuzawa suggested that HDS work with intra-department cabinets or task forces so that leadership throughout CDC understands what they can do regarding health equity. A task force at the CIO level could consider how to incorporate health equity practice.

Dr. Richardson said that in the presentations from CIO directors to HDS over the years, she has observed that they think they are doing it. Dr. Breysse's conversation was refreshing because he acknowledged that his center is not engaged in health equity work the way that he would like, and he is aware of the situation and wants to work on it. However, there may not be a clear path to "how." Any recommendation from HDS should have a "how." CIOs are doing what they know how to do, and perhaps they are not aware of what they do not know. Ultimately, the work may take place one CIO or one program at a time. There is buy-in and affirmation at the agency, and specific actions are now needed. They have "the talk" but need to be shown the steps to "the walk."

Dr. Garza added that the action steps should be measurable to show impact. The health equity indicator work is exciting and could be used in different settings.

Dr. Richardson agreed and added that it would be worthwhile, as Dr. Warne suggested, to evaluate programs rigorously to create an evidence base for programs that are not universal interventions, but are targeted and culturally tailored and believed to be effective. HDS could conceive of a platform or model for this work, which was included in the initial HDS recommendations.

Dr. Liburd said that six recommendations came from HDS, and the Office of the Director prioritized the ones that OMHHE should first pursue. The other recommendations are pending.

Dr. Warne offered to provide examples of CDC-defined evidence-based practices that do not apply in Indian Country. One example is tobacco control. Many tribes, especially in the Northern Plains, use traditional tobacco as part of prayer and ceremony. The recommendations and signage refer to "100% tobacco free." From a traditional perspective, that statement is "100% prayer free," which is culturally inappropriate. Programs that work in Atlanta do not apply in Pine Ridge, and the list of CDC best practices are not applicable in Indian Country.

Dr. Richardson said that ACD and CDC have accepted the HDS view that universal interventions do not work for all communities, and there have to be targeted interventions for high-risk communities that are culturally appropriate. It would be helpful to generate a list of programs that do work and to have rigorous evaluation to demonstrate the effectiveness.

Dr. Lichtveld suggested a timeline for the next five months until the next HDS meeting. By the end of May, HDS should receive background information on the sub-analysis, language access, and workforce issues. The three committees should have monthly conference calls and be ready to proceed at the October HDS meeting.

Dr. Richardson departed at 3:32 p.m. and the meeting proceeded according to schedule, with Dr. Liburd serving as chair for the remainder.

Dr. Liburd suggested inviting the Director of NCHS to the October 2016 HDS meeting. NCHS just released the Health US 2015 report, including a supplement on racial and ethnic health disparities. NCHS also hosted a summit on health disparities in the summer of 2015. HDS members will be contacted regarding scheduling for that meeting.

Dr. Garza suggested that the October 2016 HDS meeting be scheduled such that subcommittee members could attend the State of Health Equity at CDC Forum.

Dr. Liburd said that in the past, the Forum takes place in a morning, and the HDS meeting begins in the afternoon and continues the next day.

Mr. Fukuzawa said that he and Dr. Garth Graham (HDS member) were in Washington, DC with groups from different funders to support an upcoming issue of Health Affairs, a public policy-oriented journal that is widely read on Capitol Hill, which will focus on the theme of health equity. Planning for the issue, which is slated for publication in 2017, has not yet begun. CDC may have something to contribute to the issue.

Dr. Garza asked whether HDS could work as a group to introduce their recommendations through the journal.

Mr. Fukuzawa said that it is possible. Health Affairs will convene an advisory group to craft potential content for the issue.

Ms. Thompson commented that this HDS meeting, her second, had been enlightening as well as overwhelming, and there is still more ground to cover. She thanked OMHHE for the opportunity to participate. She noted the two recently-completed reports which had been shared with HDS, but were not discussed at the meeting. She wondered about ways to use and share that existing, rich material to advance health equity and reduce disparities. Further, some people do not know what public health is. On a basic level, how can the public health community take responsibility for dispelling myths about what public health is? An article could describe the public health / health disparities / health equity / SDOH continuum. There is not internal agreement about this language, so how can external entities be expected to know how to include themselves in it? HDS can serve as a bridge or catalyst for bringing health equity work to the field.

Dr. Liburd agreed. In many instances, they are either "preaching to the choir," or their messages are not profound or compelling enough to change people's minds. In moving forward, it will be important to make compelling statements and unifying calls to action. HDS can share any existing resources with OMHHE so that the communications staff can incorporate them in support of their mission.

Ms. Wilson asked whether the six workgroups that HDS formed around its strategic priorities would continue to meet, or would be on hold given the transition year.

Dr. Liburd said that when an OMHHE staff member is dedicated to HDS, that person can help guide HDS and OMHHE in how best to utilize their time. The group that worked on the HDS recommendations committed a great deal of time to the task. She expressed hope that guidance from HDS would focus on action and how to move forward.

Ms. Ryder recalled the beginning of her career, when there was an Office of Economic Opportunity at the federal level that was established by President Lyndon B. Johnson and subsequently supported by the John F. Kennedy administration. Much of the office's work focused on health equity, although that term was not used. The work was powerful, but the office was ultimately disbanded. Because the work was legislative in nature and not grounded in long-lasting policy, it did not persist in the long-term. An approach that is the best of both worlds could be like the Office of Advocacy and Outreach (OAO) at the US Department of Agriculture (USDA), which has accomplished a great deal. A movement must be created so that people will embrace health equity, and the concepts need to be explained clearly. The migrant health movement has pursued and embraced health equity for decades. That work has focused on improving healthcare and improving health status and also on employing those who look like, and best understand, the target population. In considering creating national and local interventions, it is worthwhile to look at historical lessons learned regarding what led to accomplishments, and what was not successful.

Dr. Liburd agreed that more time should be spent to understand more fully what led to successes, and what might need to be done differently in a different period. CDC does not typically start movements; rather, CDC provides science, data, and strategies that promote public health.

Ms. Ryder agreed and added that the strategies must be applicable, grounded, and replicable in order to create change. CDC may not start movements, but other branches of HHS can play that role. A great deal of health equity is related to poverty and a cycle of health, financial, and labor issues. One cannot consider health without also considering income, employment, education, and similar factors. She recalled the CDC exhibit of the development of public health over the years and its effects in various population groups. The HP initiative has been pivotal in many of public health's major accomplishments in recent years. Health concerns have been eradicated not only because of advances in healthcare, but also because of a public health call to action. There are ways to work collaboratively and across federal government agencies to spread the word.

Dr. Garza applauded Ms. Ryder's work in migrant health, which reflects overwhelming health disparities and human rights violations. It will take a great deal to make change in this institutional culture. She gives a lecture on migrant farmworkers in her class, and students are generally unaware of this invisible population and the abuses that they suffer.

Ms. Ryder said that the migrant health concept that was created in 1962 spawned the development of CHCs in 1967. Today, 23 million people are served. Public health and primary care touch individual lives as well as communities, and this relationship can be channeled into action. Communities across the country are trying to achieve economic opportunity from a health perspective.

Dr. Liburd posed this question to HDS, "What is the big idea for health equity?"

Ms. Thompson replied that there is not one big idea; rather, there are a number of different big ideas in different sectors. The big idea for CDC will be different from the ideas for the philanthropy and business sectors, for instance.

Public Comment

Dr. Liburd opened the public comment period at 3:56 p.m. and invited members of the public to make a statement or to raise a question. With no questions or comments presented from the public, the public comment period was closed at 4:08 p.m.

Closing Remarks / Adjourn

Dr. Liburd said that OMHHE will review notes from the meeting and consider the specific suggestions from HDS for actions before the October 2016 meeting. Actions regarding the LAP and surveys of limited English proficiency data will be pursued. The Director of NCHS will be invited to the October 2016 HDS meeting.

Mr. Vargas added that data about limited English proficiency is important, but the action also incorporates data disaggregation as a whole, including questions about sexual orientation and gender identity.

Ms. Wilson added "preferred language."

Dr. Liburd noted that several HDS members indicated interest in working with Dr. Penman-Aguilar on the workforce indicator. HDS also discussed involvement with the NCHE health indicator work, although that work is well underway. A report from NCHE may be available in time for the October 2016 HDS meeting. CDC representatives have provided feedback on those indicators.

Dr. Ro expressed concern regarding the impending new administration and opportunities for HDS to forward a recommendation to ACD regarding the valuable work of OMHHE. It is critical to secure ACD buy-in to support the continuation of OMHHE and HDS. With a new administration, there are opportunities to set or reset priorities. HDS should put OMHHE and its work upfront as a priority. As the HDS representative to ACD, Dr. Richardson can provide that priority to ACD verbally. It may be worthwhile for a group within HDS to work with Dr. Richardson on a succinct statement of support for ACD demonstrating the value of health equity and to ensure that health equity work is in the forefront as a priority for the new administration and a legacy that should be continued. A draft statement could be presented during the October 2016 HDS meeting to be vetted, voted on, and approved for presentation at the next ACD meeting.

Ms. Thompson supported that idea and indicated her willingness to work on any HDS workgroup on any of the stated action items.

Dr. Garza agreed with the need for a statement about OMHHE and health equity for the new administration. She suggested revisiting the report referenced by Dr. Ross from the initial six recommendations. She said she also hoped to help OMHHE create guidance regarding health equity language in CDC's FOAs.

Dr. Liburd said that the existing HDS FOA workgroup can be consulted when the language is drafted. The workgroup can provide comments to strengthen the guidance, which will then process through the internal clearance process.

Ms. Wilson clarified that the workgroup members were herself, Mr. Vargas, and Dr. Horner-Johnson, who worked with Mr. Dicent-Taillepierre.

Dr. Ross agreed with the idea of creating a statement such as suggested by Dr. Ro, but he noted that health equity is not under assault currently and may not be under assault with a new administration. They should not create an issue when there is not one. Their actions should speak for themselves. It is imperative for the workgroups to meet and to specify a succinct path forward of HDS priorities so that the value of the subcommittee's work is evident.

Dr. Liburd clarified that OMHHE is a provision in the ACA. A new administration presents an opportunity for ACD to take an official stance on health equity as an overriding perspective that is integrated across the agency and its work, and to reinforce the importance that HDS remain. The subcommittee has been in place since 2005, and its productivity has spoken for itself.

Dr. Ross agreed that HDS has been highly functional and active. He hoped that any statement from HDS would use the right language and put the subcommittee's "best foot forward."

Dr. Ro pointed out that in transition, there are opportunities to reinforce the value of the work of HDS—not to be defensive about the work, but to emphasize that health equity should be integrated across all of CDC's work. Different leadership interprets health equity in different ways. HDS has been explicit in its definition of health equity, which is not necessarily what everyone in public health and public health leadership believes. CDC is the nation's public health department.

Mr. Fukuzawa said that while all CIOs "talk the talk" of health equity, execution is spotty. HDS can be helpful in providing advice regarding metrics, standards, and guidance going forward.

Mr. Vargas agreed and added that in this transition, advocacy organizations are considering what issues a new administration will have to address. If the new administration believes in the work, they will see and respond to the ideas that have been promoted. A new administration is stepping into existing programs and movements, and a statement regarding priorities associated with the health equity lens will be as important as a general statement of support. He felt that HDS should craft such a statement in a manner that is not defensive, as has been suggested, and that illustrates the importance of the work of OMHHE and HDS.

Dr. Ro stressed that a new administration will look for opportunities for wins. Framing health equity as an opportunity for a win would be beneficial. She suggested scheduling a minimum of two telephone calls on this issue to begin crafting / revise a statement.

Dr. Liburd indicated that OMHHE would schedule those calls and look to HDS for help in crafting the statement.

With no additional comments or discussion, the meeting was adjourned at 4:22 p.m.

Certification

I hereby certify that, to the best of my knowledge and ability, the foregoing minutes of the April 28, 2016, meeting of the Health Disparities Subcommittee of the Advisory Committee to the Director, CDC are accurate and complete.

_____
Date

_____
Lynne D. Richardson, MD, FACEP
Chair, Health Disparities Subcommittee, Advisory Committee to the Director, CDC

Attachment #1: Meeting Attendance

HDS Members Present

Lynne D. Richardson, MD, FACEP (Chair)
Professor and Vice Chair of Emergency Medicine
Professor of Population Health Science and Policy
Icahn School of Medicine at Mount Sinai

Maureen Lichtveld, MD, MPH
Professor and Chair
Freeport McMorRan Chair of Environmental Policy
Tulane University School of Public Health and Tropical Medicine

David Fukuzawa, MDiv, MSA
Program Director-Health
The Kresge Foundation

Mary Garza, PhD, MPH
Assistant Professor
University of Maryland School of Public Health

Willi Horner-Johnson, PhD
Research Assistant Professor
Oregon Health and Science University Institute on Development and Disability

Marguerite Ro, DrPH
Chief, APDE (Assessment, Policy Development, and Evaluation) Section, Public Health
Seattle-King County

Will Ross, MD, MPH
Associate Dean for Diversity and Assistant Professor of Medicine
Washington University School of Medicine

Bobbi Ryder
CEO
National Center for Farmworker Health
(via telephone)

Hector Vargas, JD
Executive Director
Gay, Lesbian Medical Association (GLMA): Health Professionals Advancing LGBT Equality

Mildred Thompson, MSW
Senior Director and Director
PolicyLink Center for Health Equity

David R. Williams, PhD
Professor of Public Health
Professor of African and African American Studies and of Sociology
Harvard School of Public Health
(via telephone)

Cheri Wilson, MA, MS, CPHQ
Faculty Research Associate
Health Policy and Management Department
Program Director, Culture-Quality-Collaborative

HDS Members Absent

Garth Graham, MD, MPH
President
Aetna Foundation
(via telephone)

Anthony B. Iton, MD, JD, MPH
Senior Vice President
Healthy Communities, The California Endowment
(via telephone)

CDC Staff Present

Leandris Liburd, PhD, MPH, MA (Designated Federal Officer)
Associate Director for Minority Health & Health Equity
Centers for Disease Control and Prevention

Patrick Breysse, PhD, CIH
Director
National Center for Environmental Health / Agency for Toxic Substances and Disease Registry

Julio Dicent-Taillepierre, MS
Public Health Analyst/Team Lead
Office of Minority Health and Health Equity

Judy Lipshutz
Office of State, Tribal, Local and Territorial Support
(via telephone)

Domenica Nino, MPH
Presidential Management Fellow
Office of Minority Health and Health Equity

Ana Penman-Aguliar, PhD
Associate Director for Science
Office of Minority Health and Health Equity

Laura Ross, PhD
Associate Director for Communications
Office of Minority Health and Health Equity

Kem Williams, MBA
Acting Deputy Director/Management Officer
Office of Minority Health and Health Equity

General Public Present

Kendra Cox, MA
Medical & Scientific Writer/Editor
Cambridge Communications & Training Institute

Attachment #2: Acronyms Used in this Document

Acronym	Expansion
AAMC	Association of American Medical Colleges
AAPHP	Association of Accredited Public Health Programs
ACA	(Patient Protection and) Affordable Care Act
ACD	Advisory Committee to the Director
ADC	Associate Director of Communications
ADS	Associate Director of Science
AI / AN	American Indian and Alaska Native
AMA	American Medical Association
ASPPH	Association of Schools and Programs of Public Health
ASPR	Assistant Secretary for Preparedness and Response
ASTHO	Association of State and Territorial Health Officials
ATSDR	Agency for Toxic Substances and Disease Registry
BLL	Blood Lead Level
BMJ	*British Medical Journal*
CBC	Congressional Black Caucus
CBO	Community-Based Organization
CBPR	Community-Based Participatory Research
CDC	Centers for Disease Control and Prevention
CEHCD	Commission to End Health Care Disparities
CHC	Community Health Center
CHW	Community Health Worker
CIO	Centers, Institutes, and Offices
CMS	Centers for Medicare and Medicaid Services
CSELS	Center for Surveillance, Epidemiology and Laboratory Services
CUNY	City University of New York
CUPS	CDC Undergraduate Public Health Scholars
DFO	Designated Federal Official
ED	Emergency Department
EHTER	Environmental Health Training in Emergency Response
EIS	Epidemic Intelligence Service
EOC	Emergency Operations Center
EPA	(United States) Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FOA	Funding Opportunity Announcement
FTE	Full-Time Equivalent
GPA	Grade Point Average
HDS	Health Disparities Subcommittee
HHS	(United States Department of) Health and Human Services
HP	Healthy People (2020)
HRSA	Health Resources and Services Administration
HSHPS	Hispanic-Serving Health Professions Schools
HSPH	Harvard School of Public Health

Acronym	Expansion
HUD	(United States) Department of Housing and Urban Development
IPV	Intimate Partner Violence
JAPER	Joint Action Plan to Eliminate Racial and Ethnic Discrimination and Promote Equality
JPHMP	*Journal of Public Health Management and Practice*
KKI	Kennedy Krieger Institute
LAP	Language Access Plan
LGBT	Lesbian, Gay, Bisexual, Transgender
MD	Medical Doctor
MMWR	*Morbidity and Mortality Weekly Report*
MPH	Master of Public Health
NACCHO	National Association of County and City Health Officials
NACP	National Asthma Control Program
NASOMH	National Association of State Offices of Minority Health
NCBDDD	National Center for Birth Defects and Developmental Disabilities
NCEH	National Center for Environmental Health
NCHE	National Collaborative for Health Equity
NCHS	National Center for Health Statistics
NHANES	National Health and Nutrition Examination Survey
NHS	National Health Service
NIHB	National Indian Health Board
NIMHD	National Institute for Minority Health and Health Disparity
NPL	National Priority List
OADP	Office of the Associate Director for Policy
OAO	Office of Advocacy and Outreach
OD	Office of the Director
OMH	Office of Minority Health
OMHHE	Office of Minority Health and Health Equity
ONC	Office of the National Coordinator
OPHPR	Office of Public Health Preparedness and Response
OSHA	Occupational Safety and Health Administration
OSTLTS	Office for State, Tribal, Local and Territorial Support
OWH	Office of Women's Health
PAHO	Pan American Health Organization
PHAP	Public Health Associates Program
PICH	Partnerships to Improve Community Health
PLLUSS	Public health Leadership and Learning Undergraduate Student Success
RWJF	Robert Wood Johnson Foundation
RWJUH	Robert Wood Johnson University Hospital
SDOH	Social Determinants of Health
SES	Socioeconomic Status
SME	Subject Matter Expert
STI	Sexually Transmitted Infection
STLT	State, Tribal, Local, and Territorial (Subcommittee)
SVI	Social Vulnerability Index
UK	United Kingdom

Acronym	Expansion
UNC	University of North Carolina
US	United States
USDA	United States Department of Agriculture
VA	(United States Department of) Veterans Affairs
WIC	Women, Infants, and Children
WICC	World Indigenous Cancer Conference