MEETING MINUTES
Advisory Committee on Interdisciplinary Community-Based Linkages
May 16-17, 2019

Committee Members Present
Teri Kennedy, Ph.D., MSW, LCSW, ACSW, FGSA, FNAP
Chair

James Stevens
Vice Chair

Nicole Brandt, PharmD, MBA, BCGP, BCPP, FASCP
Katherine Erwin, DDS, MPA, MSCR
Joseph H. Evans, Ph.D
Roxanne Fahrenwald, MD, FAAFP
Robyn L. Golden, MA, LSSW, ACSW
Bruce E. Gould, MD, FACP
Parinda Khatri, Ph.D.
Lisa Zaynab Killinger, DC
Kamal Masaki, MD
John E. Morley, MB, BCh
Sandra Pope, MSW
Zaldy Tan, MD, MPH
Jacqueline R. Wynn, MPH
HRSA Staff in Attendance

Joan Weiss, PhD, RN, CRNP, FAAN, Designated Federal Official, ACICBL, Division of Medicine and Dentistry
Kennita Carter, MD, Designated Federal Official, ACTPCMD
Samantha Das, Designated Federal Official Liaison
Robin Alexander, HRSA Liaison, Advisory Council Operations
Kim Huffman, Director of Advisory Council Operations
Janet Robinson, Advisory Committee Liaison, Advisory Council Operations

Day 1-May 16

Introduction
The Advisory Committee on Interdisciplinary, Community-Based Linkages (ACICBL) convened its meeting at 8:30 a.m., on Thursday, May 16, 2019. The meeting was conducted in-person and via webinar and teleconference from the headquarters of the Health Resources and Services Administration (HRSA), 5600 Fishers Lane, Room 5E29, Rockville, MD 20852. Dr. Weiss welcomed the Committee, thanked them for their work, took roll call, and gave instructions regarding meeting participation. All of the members were in attendance except Dr. Geraldine Bednash. Dr. Weiss invited HRSA staff to introduce themselves.

Dr. Weiss informed the Committee that the National Center for Health Workforce Analysis will soon launch an online tool that presents visual summaries of data on Bureau of Health

Workforce (BHW) Education and Training Programs. The tool summarizes data from academic Year 2012-13 through the present. Summaries illustrate which programs have grown and enhanced the US health workforce. Dr. Weiss noted that HRSA's health workforce training programs focus on distributing providers to areas where they are needed most. She said the tool would be launched within a week of the meeting and that Committee members would be notified and given access at that time.

Dr. Teri Kennedy, ACICBL Chair, also welcomed the Committee and invited members to introduce themselves. She said that her role as Professor and Associate Dean at the University of Kansas School of Nursing included elevating interprofessional practice and education across the university. After Dr. Brandt introduced herself, Dr. Weiss congratulated her on behalf of the Committee for receiving the American Geriatrics Society's 2019 Dennis W. Jahnigen Award for her work in training healthcare professionals in geriatric care.

Discussion and Approval of Previous Meeting Minutes

Dr. Kennedy asked the Committee if they recommended any corrections or additions to the August 16, 2018 meeting minutes. Mr. Stevens moved to adopt the current version of the minutes. Ms. Pope seconded the motion. There were no comments when Dr. Kennedy invited discussion. Dr. Kennedy asked for a vote and the Committee unanimously voted to adopt the minutes.

Dr. Kennedy asked the Committee if they recommended any corrections or additions to the October 30, 2018 meeting minutes. Dr. Morley moved to adopt the current version of the minutes. Dr. Masaki seconded the motion, which was unanimously carried.

Dr. Kennedy asked the Committee to consider a title no longer than 10 words for the title of the recommendations report to be developed based on the current meeting. She noted that the meeting presentations would likely provide information relevant to the Committee's recommendation development.

Presentation: The Evolution of Population Health

J. Lloyd Michener, MD, Professor of Community and Family Medicine, Duke University

Dr. Kennedy introduced Dr. Michener, Professor of Community and Family Medicine at Duke University. Dr. Michener stated that he is a family physician who works in population health in North Carolina. His 25 years of experience includes working closely with a Federally Qualified Health Center (FQHC), the State health department, the Tobacco Trust Fund, Reynolds Charitable Trust, Medicaid, and with community partners to improve health outcomes, especially in communities comprising predominantly racial/ethnic minorities. He has worked with most States in the US and with organizations from about 20 countries. A major focus of his current work is identifying key elements of effective and successful practice.

Dr. Michener's presentation included discussion on: 1) the shift in the professional focus from health care to population health, 2) the current rapid growth in and nature of collaborations for addressing population health issues, 3) the types of partners involved in these collaborations, and 4) effective tools and strategies for improving health outcomes.

Dr. Michener noted that there are multiple definitions of population health. He defines population health as "the health outcomes of a group of individuals, including the distribution of such outcomes within the group." He said that the field has shifted focus beyond healthcare, which is essential but not sufficient for health. His focus is on how clinicians can improve health at the community level.

Cost is a major driver of population health. Dr. Michener noted that healthcare costs in the US are higher and increasing more rapidly than in other countries, both industrialized and non-industrialized. While the US spends more than other countries, its citizens are not living longer; The US was once around the median for life expectancy in industrialized countries, however, over the past 20 years it has become the lowest ranked. The probability of women in the US living longer than 50 years has plateaued since 1980, while it has increased in 21 other industrialized countries. Dr. Michener invited Council members to comment and offer possible explanations. Several explanations were put forth including:

- The opioid crisis. While the opioid crisis may have contributed to the recent decline, it would not explain the decades long pattern.
- Survival related to healthy lifestyle choices, which cost little and would not be related to the observed increase in expenditures. The over-reliance of the US on medications and medical treatment was noted. It was agreed that the US focuses more on treating people when they are sick than on helping people to live healthy lives and not become sick and that a shift in focus on this issue is "the essence of population health."
- Stress, especially economic stress. Although stress is likely a cause and should be researched, the current data are not clear about the role of stress.
- Work-family balance as a stressor for women. Although work-family stressors have become more of an issue during the timeframe presented, these stressors are not unique to the US.

A question was asked if the effects were mostly among lower socioeconomic groups in the US. Dr. Michener responded by presenting a map of the US showing whether female mortality rates in each county improved substantially, improved minimally, or worsened in comparisons between 1992-96 and 2002-06. Again, he invited the Committee to identify an explanatory pattern.

- The pattern in Montana appeared to be that urban areas were more likely to improve than rural areas and that both rural and urban areas of California had improved substantially. While rural versus urban status matters, some rural areas are improving more than some urban areas noting that rural areas in Maine have improved substantially.

The key point is that it is necessary to analyze local data to identify and understand factors affecting local health. Patterns of factors that affect health outcomes vary between geographic areas.

Dr. Michener presented US maps showing geographic shifts in excess mortality due to colorectal cancer over the past 30 years. The data have raised the issue of whether colorectal cancer screening should be more focalized. He invited the Committee to suggest an explanation for the shifts. One explanation suggested the variance in access to healthcare. Dr. Michener said that this is sometimes, but not always, the case. He added that the pattern varies by cancer type.

Dr. Michener and colleagues have collaborated with Federal partners to identify a causal pattern and have not yet established one. They observed that industrialized river basins currently have the highest excess mortality; but this is not necessarily a causal relationship. He reiterated that the key point is that effective interventions are based on local data. Disease risk factors are local. Primary care providers must be aware of patterns in the communities they serve and adjust their approach to care, screening, and outreach to respond to local patterns and needs.

Dr. Michener presented a slide showing age-adjusted relative risk for hospitalization for arterial stroke by county in Virginia, based on data collected between 2005 and 2009. Risk is very low in Northern Virginia, and seven standard deviations higher in the southern part of the State from the middle going toward the coast. Dr. Michener invited Council members to suggest possible explanations. A question was posed as to whether risk was associated with military transient populations. Dr. Michener said this is not the case, since there is a substantial military transient population in Northern Virginia. He added that the data pattern does not appear to be explained by socioeconomic status, smoking, dietary patterns, access to healthcare, or access to emergency medical services. Highest prevalence occurs in the basin of the Roanoke River. The Virginia State health director and governor are very interested in why this is the case. If the cause were waterborne, it would be around the river, not the basin specifically. Dr. Michener said Republican governors are concerned with these kinds of findings because avoidable illness is costly in terms of State-covered expenses and productivity. Dr. Michener emphasized that primary care programs should target diseases that are locally prevalent using outreach approaches tailored for the local community.

A question was asked as to whether there is any relationship between river basin proximity and socioeconomic status. Dr. Michener said analysis indicates that there is not. Another explanation that was considered was if the relationship could be related to flooding and the associated stress of experiencing a natural disaster. Dr. Michener said he does not know but that hypothesis is the type needed to identify patterns and improve care.

Dr. Michener presented a map of the Bronx, New York, showing data on asthma visits among Medicaid patients. Geocoded data showed that some apartment complexes had rates 100 times greater than rates of other places in the catchment area. Dr. Michener invited Council members to offer possible explanations. One explanation for consideration was atmospheric pollution. Dr. Michener said this hypothesis was tested but ruled out. Asthma rates in the area being studied were not associated with proximity to the interstate highway as they do in areas where pollution is a causal factor, such as Long Beach and San Francisco, California. Researchers convened community groups, the local health department, primary care providers, and researchers to discuss why asthma was dramatically more prevalent at some addresses than others that were close neighbors. A group of Latina mothers who already had organized to advocate said that the high rates were due to mold in building air ducts and rat infestation. This had resulted in 50-60 percent chronic absenteeism from school. School administrators had blamed the problem on gangs. Mothers acknowledged gangs to be a local problem. But they said the primary problem was building code violations resulting in illness. They were in the process of suing the landlords responsible. This group formed a coalition with housing authorities and the county health department. The housing authority appreciated that this resulted in assistance from the health department in prioritizing code violations. The coalition worked with banks to obtain low-

interest loans for repairs so that repairs would not result in prohibitive raises in rent. These actions resulted in a 90 percent reduction in asthma-related visits to emergency departments.

Dr. Michener reported that researchers geomapped asthma cases among Medicaid participants in North Carolina. Results showed that asthma is related to being downstream from tobacco barns. A coalition that included schools and school nurses accomplished changes that resulted in a sustained 70 percent reduction in asthma-related admissions to emergency departments in the area of initial study, and a 60 percent reduction statewide. The community did not experience reduced costs because people responded by taking medications. This approach has been implemented in Boston and Cambridge, with approximately 80 percent reductions in asthma-related hospital admissions within the first 12 months.

Dr. Michener said engaging local people who are affected by health issues and multi-sectoral stakeholders, and presenting relevant local population health data can produce powerful results. He said it is crucial to listen to local perspectives and potential explanations for data patterns. One Committee member pointed out that it is rare for any intervention to achieve such dramatic results. Dr. Michener agreed, noting that the approach is nearly as effective as classic immunizations. Dr. Michener said that North Carolina, at the governor's direction, is currently launching universal screening for social determinants with more than 4,000 community-based agencies, with the goal of reducing chronic disease, especially in underserved and rural communities. Primary care groups are considered key to the effort's success. Dr. Michener said that patients are living with health issues and are generally willing to change to improve health. Clinicians are more likely than patients to find it difficult to change their perspective and approach. Reviewing local data to identify patterns of illness and consider how to address them is usually foreign to clinicians. He said that it is important to change this perspective so that clinicians, especially primary care providers, and health systems form partnerships with communities to achieve improved population health. The approaches presented are scalable.

A Committee member stated that the fields of social work and public health always have focused on environmental and social determinants of health. She said these seem to have become a focus of the broader field of healthcare quality due to the work of Don Berwick and funders embracing the approach as a way to reduce costs. She asked whether Dr. Michener agreed. Dr. Michener said he believes the driver is more the economic impact of dying earlier than cost of care. He said this is the concern expressed by governors. Governors want productive populations that attract businesses to their States. Dr. Michener agreed that the approach he discussed is not new, and has been embraced more recently.

Dr. Michener reported that the Centers for Disease Control and Prevention (CDC) and Robert Wood Johnson Foundation funded an initiative to gather data and share it with the 500 largest cities in the US. An online resource presents maps of chronic disease rates, social determinants, and other data for each city. Data are not yet available for rural areas, but will be in the future. Most data reported were gathered through telephone surveys. Some are projected.

Dr. Michener stated that electronic health records can provide data to inform targeted interventions. These data are more accurate and timely than other data. Dr. Michener said that aggregate electronic health record data consistently provide surprising information about

community health. He presented examples, such as asthma predictably correlating with lower socioeconomic status in Durham, North Carolina while cancer was more prevalent in an upscale community. Researchers determined the cause to be radioactive isotopes the university health system dumped into open trenches in the affluent area during World War II. The resulting groundwater contamination is a likely cause of disproportionately high cancer rates in this area.

Durham health officials have used these data to map most chronic conditions by census tract. The health department and supporting health system use these data to target reductions in chronic disease. Dr. Michener pointed out that North Carolina is not a Medicaid expansion State. Duke Health System invests millions of dollars annually in community interventions targeting chronic disease, especially in low-income communities. He asked the Committee why this is considered a good business decision. A question was as to whether it were a response to changing reimbursement models. Dr. Michener said this approach started before the change in reimbursement models, when 99.8 percent of reimbursement was fee-for-service. Another Committee member asked if this was in response to absenteeism. Dr. Michener said that this is the case. Many Duke Health System employees live in the community and were affected by local risk factors, frequently missing work to care for family members. In addition, the effort was to reduce emergency department visits and costs to the hospital associated with visits from Medicaid and uninsured patients, which are not entirely covered by Medicaid. The hospital loses less money investing in preventing emergency department visits than it does in providing emergency department care. Reducing absenteeism and net cost of care are priorities for all big health systems, especially non-profit and safety net hospitals. The approach reduces costs for high-volume hospitals, but increases costs for hospitals with very low volume, such as critical access hospitals in rural areas.

A question was asked as to what lessons have been learned while developing the process Dr. Michener presented and how clinicians had learned to change their perspectives to make day-to-day decisions that support this approach. The Committee member observed that chief executive officers and chief financial officers can endorse the approach, but this does not necessarily result in implementation by clinicians. Another member suggested that the Committee consider recommending that education institutions teach this type of data analysis and utilization as a core competency for health professionals. A core issue is getting professionals to collaborate and to understand that they are serving a community, not just individual patients.

Dr. Michener said that schools of public health are training students to share data and to develop partnerships with primary care providers and health systems. He said that the key to successful implementation is developing trusting relationships. He reminded the Committee that the population is aging, with increasing rates of chronic disease. Obesity prevalence also is increasing. He pointed out that most factors that affect health are not healthcare. He said that healthcare has traditionally either targeted the total population or individuals. The field is now identifying and targeting clusters of high-risk people through clinical and public health interventions. He presented an example study that showed people within walking distance of Duke University did not use its primary care services. Instead, they walked to its emergency department. Researchers conducted listening sessions in 40 churches over the course of a year to understand why. The sessions indicated the community did not trust the primary care providers. A political action committee supported opening a neighborhood clinic, less than a mile from the

existing family medicine center, staffed by local residents. Community members perceived this clinic, but not the existing center, to be theirs. The clinic opening resulted in a drastic reduction in emergency department utilization. Afterward, residents of housing for seniors in Durham approached Dr. Michener saying their needs for services were still not met, though the clinic was available to them and free transportation was provided. Listening sessions indicated that the average age of seniors in these housing communities was 70 years. Residents had multiple chronic disorders; 44 percent had major psychiatric disorders. A large majority (84%) were African American; most had not graduated from high school; and their average annual income was $7,000. After paying rent, most of them were living on $5,000 annually. The medical and nursing students conducting listening sessions asked participants what resources they wanted to address their needs for medical services. Participants requested home visits. So, the Duke group assigned a geriatric family physician, geriatric nurse, and geriatric social worker to work on-site. This resulted in a 68 percent reduction in costs associated with inpatient care. Health outcomes also improved dramatically. The senior community now has better hypertension control than Duke faculty. This approach is being scaled up statewide.

Dr. Michener cited an Institute of Medicine report that analyzed efforts across the US to integrate primary care and public health with the purpose of improving population health. Researchers identified elements common to successful efforts. These included: 1) a vision related to improving health rather than healthcare, 2) engaging the community, listening to community perceptions of needs and acceptable solutions, 3) aligning with community leaders, 4) designing with a plan for sustainability, and 5) utilizing data and tracking outcomes. Dr. Michener stated that tracking outcomes was a key component of sustainability. This study led to a community-centered multi-sector model of health that includes partnerships among healthcare providers, businesses, philanthropic and non-profit organizations, housing agencies, law enforcement, and other groups. Broader participation supports diverse and sustainable interventions. Dr. Michener said that partnerships are necessary for effective interventions. Active, vocal partners increase impact.

The State of North Carolina currently invests in uniform screening for social determinants, and in multisector collaboration to support referring Medicare patients to necessary housing, food, and social services. Other States, including Colorado and California, are investing in similar approaches. Funders such as the Robert Wood Johnson Foundation, the Kresge Foundation, and the de Beaumont Foundations are supporting sustainable coalitions that support innovative, data-driven interventions. Dr. Michener edited a book called *The Practical Playbook* about the lessons learned from collaborating with community partners to develop data-driven approaches to improve community health. It will be available online for no cost.

Dr. Kennedy thanked Dr. Michener for his presentation and invited questions. A Committee member posed the question as to how data extraction can be improved, and how data can best be shared with partners. Dr. Michener said that emergency department principal diagnosis data are the most useful data. He also said that it is useful to learn Health Insurance Portability and Accountability Act (HIPAA) regulations for data sharing. He said these regulations allow more data sharing than most people are aware of. Many health system administrators think they are not allowed to share data when they actually are. CDC offers advice on appropriate data sharing.

A question was asked as to which educational activities would help to support the approach Dr. Michener presented. Dr. Michener said students in diverse health professions are eager to learn this material, but faculty do not know how to teach it. Tools and methods need to be developed and shared with faculty and students. A Committee member noted that a group she works with at Morehouse School of Medicine is working on using tele-learning and tele-health approaches to educate students about community interventions, including lessons learned.
Dr. Weiss thanked Dr. Michener for his presentation.

Presentation: CommonSpirit Health's Journey in Developing the Total Health Roadmap
Shannon Duval, MA, Senior Vice President of Philanthropy, CommonSpirit Health
Elizabeth Evans, PhD, Program Director for Implementation, CommonSpirit Health

Dr. Kennedy introduced Ms. Duval and Dr. Evans.

CommonSpirit was formed through alignment of the Catholic Health Initiative and Dignity Health. The organization was founded by women. Its work is primarily connecting with communities, especially vulnerable populations, to serve basic needs. Ms. Duval shared the quote from Max Carver, "Empathy is the starting point for creating a community and taking action. It's the impetus for creating change," and noted this reflects the work to be presented. Ms. Duval stated that her role is working with philanthropist donors, while Dr. Evans' role is in program administration and community engagement.

Dr. Evans said the total health roadmap the group has developed focuses on how healthcare systems can better recognize and work with communities to address social determinants of health. The project was initiated in 2015, supported by a Robert Wood Johnson Foundation $2.5 million planning grant. Funding is matched by the Catholic Health Initiative mission and ministry funds. The initial step was to conduct community health needs assessments and to engage communities in conversations about how health systems can address social determinants. Participants in these conversations developed recommendations. By July 2016 participants had identified several essential activities. Leaders made recommendations regarding integrated behavioral health, community partnerships, and accountability. They then developed a 3-year plan to implement recommendations and form a foundation for sustained implementation. A fundamental aspect of the approach is that health care systems should define health broadly. Another is the belief that system-level changes are necessary to address the complex problems affecting community health.

The project focuses on three strategies: 1) transforming providers' roles, 2) strengthening community organization roles, and 3) strengthening leadership accountability. Transforming providers' roles includes integrating universal screening for social determinants and providing referrals and follow-up care for patients. Strengthening community organization roles includes learning about communities from patients and applying these lessons to work with community partners. Strengthening leadership accountability includes making leaders accountable for recognizing the impact of social determinants and the importance of striving toward health equity.
CommonSpirit's vision is, "Rooted in our foundational values of human dignity and social justice, we are an enduring network of healthcare anchor organizations fully engaged with their

local communities to ensure individuals and families have every opportunity to live the healthiest lives possible." CommonSpirit defines health equity as all people having every opportunity to live the healthiest life possible. The organization's theory of change is based on a model presented in the National Academies of Science 2017 Communities in Action report. This theory assumes that communities engaged in multi-sector collaboration lead to increased health equity, shared vision, and value, which increase community capacity, which then increases engagement. Dr. Evans emphasized that these relationships are circular, not linear.

CommonSpirit's first strategy is to integrate universal screening for social needs into primary care. This depends on a long-term, trusting relationship between provider and patient. It allows providers to understand challenges patients face. The screen is offered to all patients. Information learned from screens informs conversations with communities about their needs and how these needs can be addressed during clinical encounters. The goal is continuity of care and effective collaboration. In addition, data collected can contribute to a national evidence base for addressing social determinants in primary care. CommonSpirit's approach to universal screening for social needs is to integrate full-time community health workers into primary care teams. The organization has accomplished this in 12 clinics where screens are offered to every patient.

Teams are building community resource databases to support referrals. These include resources that are not easily found. The database also supports tracking referrals and their results, and maintaining key information about community partners. The team is working on integrating the new database with electronic health records and on developing a community information exchange.

In Colorado CommonSpirit currently operates jointly with the Adventist Health System two family medicine residency clinics in Westminster and Pueblo, a rural clinic in Durango, a safety net clinic in Colorado Springs, and an urban health clinic in Golden. In Iowa, CommonSpirit operates jointly with Trinity Health's three urban health clinics in the greater Des Moines area and one rural clinic in Centerville. These clinics are embedded in the Accountable Care Organization. The Iowa team plans to expand to two additional rural health clinics. In Kentucky, the group operates a rural family medicine clinic in Berea and a rural family, pediatric, and adolescent clinic in London, Kentucky. These clinics serve highly distressed Appalachian counties. Projects are required to use a core set of screening questions, employ at least one full-time community health worker, integrate technology to support electronic capture of screening results and care management activities, and develop ability to track and report clinical outcomes. In addition to improving care quality, employing community health workers offers an entry point for community members interested in healthcare careers.

CommonSpirit is testing and comparing three approaches to using technology for capturing and managing data. The Colorado sites are testing Epic brand electronic health records, with screener elements integrated into the system. Aunt BERTHA online resource houses information about community resources and case management. Iowa sites are enhancing an existing database management tool by adding functions to manage case management and community resource data. These sites are testing use of iPads to collect screening data more efficiently. The Kentucky site developed an electronic data collection platform that integrates with electronic health records.

Dr. Evans noted that rural sites participating in the project did not begin with developed community resource databases. Urban sites typically use resources such as 2-1-1[1]. Rural and urban community resources may differ. For example, churches often have a broader and more important role in rural than urban communities. Therefore, CommonSpirit believes it is important to develop a database of rural community resources that facilitates information exchange and that can be updated in collaboration with partners such as 2-1-1 or Aunt BERTHA.

Dr. Evans stated that the screening instrument was developed with input from nurses and others who have worked with the communities served. This input resulted in a set of nine simple questions about needs for support in seven domains. The developers wanted to assess not only current need but whether respondents had experienced need during the past 12 months. To date, more than 40,000 individuals have provided screens. One in five respondents has indicated need. Between 60 and 70 percent of Medicaid patients indicate need. Most patients in need indicate need in more than one domain. Food insecurity is the need identified most often by respondents from 11 of 12 participating clinics. Financials stress resulting in skipping medication and lack of transportation are also commonly identified needs.

About half of patients who identify needs refuse assistance with those needs. Centers for Medicare and Medicaid Services (CMS) accountable care organizations have observed similar results. Dr. Evans noted this is partly because patients are asked to report only whether they have experienced any need in the past 12 months. Need may not be current. It may also be because patients are not comfortable asking for assistance with these domains in a primary care setting. CommonSpirit hopes that, as the screening becomes normalized, patients will become more comfortable asking for assistance with their needs. In some cases, providers have successfully encouraged patients who report need on the screener to work with a community health worker to get support in addressing those needs. When patients express urgent need, a community health worker contacts them before leaving the clinic. They may receive an emergency food box or assistance getting emergency shelter. Patients seem to be more open to accepting help when the provider recommends it directly. Dr. Evans said it is difficult to determine why people refuse assistance after indicating need, since a person who does not want assistance likely prefers not to discuss why. CommonSpirit hopes that patient education, provider encouragement, and word of mouth communication among patients will encourage patients in need to accept assistance when it is needed. Some parents may be worried that expressing need or accepting assistance may jeopardize custody of their children. Outreach and education are necessary to overcome this fear. For example, the community health worker in London, KY, which has been hard hit by the opioid crisis, emphasizes that her role is to address patients' needs not to enforce regulations.

A Committee member inquires as to who conducts patient screens. Dr. Evans stated there are two approaches. One approach is for the medical assistant to give the patient the instrument to complete after collecting other vital sign data, explaining that it is additional vital sign data. Patients complete the screen after the medical assistant leaves the room and before the physician or nurse practitioner arrives. This makes the screen results immediately available and facilitates

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[1] The Federal Communications Commission reserved the telephone 211 for local or regional calling centers with referral specialists who provide information about public and private health and human service agencies.

the clinician's encouraging the patient to connect with a community health worker. Some medical assistants are uncomfortable with this process. Another approach is to have the screen completed as part of the registration process. Registration desk personnel explain the importance of completing the form, then notify the community health worker of needs, so that the community health worker can connect with the physician or nurse practitioner at the time of the visit. In this process, the screen is entered into the patient record and is available to the clinician during the visit. Providers report valuing support provided by community health workers, yet expressed concern that if they were responsible for the referral process, they would send patients to agencies that were no longer in operation. Health care providers reported lack of knowledge of available resources, lack of adequate time to discuss patients' needs, and lack of competence in motivational interviewing. Over the course of implementation, "warm handoffs" from clinicians to community health workers are becoming more common. Providers are increasingly asking patients if they have completed screens, and encouraging them to connect with a community health worker to address those needs. Clinic staff are increasingly accepting of the screener as part of daily workflow. In some clinics, this process was first introduced with just one or two providers. Others observed and learned how to integrate the process into their own work. The process of acceptance and integration occurred very quickly.

Dr. Evans noted that an important factor in success is for community health worker services to be payer agnostic. Clinicians did not want to determine whether individual patients were eligible for services. A Committee member asked if CommonSpirit will seek reimbursement for community health workers' services. Dr. Evans stated that the organization is exploring reimbursement strategies such a leveraging value-based contracts. Savings that can be attributed to community health workers include reducing rates of skipping appointments and increasing medication adherence. The initial goal is to demonstrate the value of integrating community health workers into the clinical team, without making resources and support dependent on reimbursement coverage. A Committee member requested a description of community health workers' tasks. Dr. Evans said the original plan was to have patients complete the screens without assistance, in order to get more honest responses. However, community health workers sometimes assist patients who have difficulty reading. In these instances, the community health workers read the screen items to the patients. Community health workers have offices with doors to ensure privacy while they speak with patients. The community health workers contact may be immediately after the visit at the office, via telephone, or after the next clinic visit. Community health workers sometimes conduct home visits with patients who have difficulty getting themselves to the clinic. However, this also results in reduced availability to other patients at the clinic, so project staff are considering the best way to address this issue.

A Committee member inquired if community health workers work outside the clinic setting. Dr. Evans stated the current approach is to respond to patients who come to the clinics. Participating clinics also work to connect emergency department patients with primary care. Community health workers collaborate with community partners and are allotted time to observe community agencies' operations. In addition, program outreach nurses collaborate with churches and other community-based organizations to engage patients with the healthcare system. The main focus of the current program is to connect the role of community health workers with primary care provision. A Committee member reported that a group he worked with in Connecticut also screened for social determinants of health in a very low literacy population. They used

technology that allows phones to read items to patients in several languages. This allows community health workers more time for other tasks. Dr. Evans said CommonSpirit clinics have used interpreter headphones.

Dr. Evans presented challenges faced during project implementation. One challenge is that patients in most need of service are often also the most difficult to contact and assist. Texting is one of the more effective approaches for contact because many patients have Lifeline Program free cell phones. They sometimes run out of voice minutes but can stay connected via text.

Another challenge is that some clinics have had difficulty integrating technology. In addition, some communities lack resources to address needs. Community health workers have helped to identify need and community capacity to address those needs. Community partners are working to help patients access resources that are available and to be creative in using them to address needs as much as possible. Dr. Evans noted that many cases are challenging and it is important to track, prevent, and address burnout among community health workers.

Key lessons learned during project implementation are:

- Not everyone who identifies needs wants assistance.
- Community health workers must be engaged in discussions of process improvement.
- It is important to understand the range and depth of community health worker encounters discussing patients' needs.
- Clinics must hire a community health worker coordinator who connects with workers regularly, provides back-up services as needed, assists with data-related tasks, and helps link daily tasks to the mission of improving community health.
- Clinics must be prepared to face gaps in local resources. They also should not compete with local organizations for funding. They should support local agencies in increasing their capacity.

Dr. Evans was asked to describe the process for selecting technology and whether the project team had encountered any gaps in technical platforms. She responded that program developers first determined community health workers' need to support their data collection and management tasks and started with a basic framework and compared several products, including Aunt Bertha and Healthify. They sought a platform that would collect and analyze screen data and data on community health workers' actions responding to patients' needs. The platform had to have a function to support recording and analyzing notes. It had to support refining community resource information and printing resource lists tailored for individual patients. In addition, the platform had to support tracking referral responses and what happens when patients use services at other agencies. The project also required a resource with a mapping function that would allow community health workers to identify resources within specified proximity to patients' homes or the clinic. The project team wanted to be able to integrate these functions and to have the data accessible through electronic health records. The initial requirement was to make screening data and initial community health worker action data available in electronic health records, with single sign-on access for clinicians, clinic managers, and front desk staff. Project electronic health records do not yet support all of these functions, but the platform supports adaptations.

The second project strategy is strengthening roles as community organizations. Project staff's conversations with community representatives are informed by screening and referral data. For example, many patients in a Kentucky clinic needed emergency food boxes. Clinic staff contacted food pantry staff and found that they wanted to identify additional access sites for emergency food boxes. The clinic and hospital are now access sites; and project staff have a relationship with the food pantry network and are collaborating to address community food security issues. Project staff also are analyzing telehealth roadmap information to identify and disseminate best practices in collaborating with communities to improve health.

CommonSpirit participates in a national multi-system collaborative network working to advance the role of health systems in addressing community needs. These efforts include considering how to improve coding and billing data to reflect information about social determinants. The organization also is developing a learning platform and a library of best practices to share with a network that currently spans 21 States. Project staff are working to connect their work with relevant national initiatives.

Dr. Evans reported the project has shown community health workers to be essential assets to primary care teams. They have established good working relationships with local agencies and have helped to connect public health resources with clinical primary care.

Ms. Duval said project staff are working to determine how best to share information about best practices. They also are working to expand the definition of sustainability beyond conventional reimbursement models. They are working on this with the Catholic Health Initiative payer strategy group and considering how to collaborate with other partners to address this issue. Considerations include defining a role for philanthropy in sustainability planning and considering how other funders can support project replication.

Key lessons learned include:

- Significant effort is required to identify high-quality community resources and to establish working relationships with community partners.
- The field needs a common language and shared principles for how national organizations and local and regional systems collaborate with communities to address health equity.
- Society needs to invest in the development of operational infrastructure and processes to support implementation and evaluation of effective, sustainable programs. It is crucial to sustain effective programs.

CommonSpirit's third strategy is strengthening leadership accountabilities. The group is interested in learning how to identify leaders who can contribute to transformation of systems to support community engagement with the purpose of addressing social determinants of health, and to implement this support as early as possible to minimize negative effects of social determinants. CommonSpirit also prioritizes evaluation of leadership engagement at local, regional, and national levels. The group also is working to develop a learning program that will support its work in diverse communities that range from critical access hospitals to academic medical centers. A major priority is developing metrics of health equity at local and national levels.

CommonSpirit's current focus is on connecting primary care, healthcare systems, community advocacy, and policy work to build health equity. The group is applying the Pathways to Population Health framework. This framework comprises four portfolios of population health: 1) physical and/or mental health, 2) social and/or spiritual well-being, 3) community health and well-being, and 4) communities of solutions. The first portfolio focuses on patient populations stratified by diagnosis or complexity. The Total Health Roadmap focuses on Portfolios 2 and 3, working to address social determinants of health in a specific population. These portfolios also include applying results of efforts to address social determinants to developing evidence- and place-based initiatives.

The healthcare anchor network that CommonSpirit belongs to focuses on Portfolio 4. This work addresses institutional and social inequities through developing communities' cultures of health.

CommonSpirit has successfully organized its program to commit to the American Hospital Association's 123 Equity Pledge, to be diverse and inclusive, and to develop transformative strategies. The organization is now working to leverage its infrastructure and its informational and financial resources, such as processes for needs assessment and community health improvement planning, to learn more about the causes of health disparities within communities. They also want to learn more about understanding patients' needs, and about effective approaches to communicating and collaborating with other agencies to address those needs.

Dr. Evans pointed out that health systems are usually the largest employers in the communities where they are located. They are part of the local economy; so their treatment of patients and employees, and relationships with their communities are important. In addition, their funding structure is different from social service agencies, which often have a small budget. It is important for health systems representatives to understand and be sensitive to these differences. In addition, health systems could learn about efficiency from social services agencies.

Dr. Evans stated that an initial step in designing CommonSpirit was soliciting input about operations and vision from clinicians, staff, administrators, health coaches, and social workers at participating clinics. Health coaches and social workers were the main proponents for integrating community health workers into primary care teams. These professionals noted patient needs were beyond their capacity to address and that support from community health workers would free them to offer their expertise rather than focus on addressing overwhelming basic needs. Dr. Evans re-emphasized the need to listen to those responsible for program implementation, and to identify the challenges early in the implementation process. She said that implementation processes resemble an overlapping Mobius strip more than a cycle.

CommonSpirit uses the Reach, Effectiveness, Adoption, Implementation, Maintenance (RE-AIM) evaluation framework as well as Cabaj's framework for evaluation systems change. The organization aims to assess drivers of systems change and the factors that affect those drivers in addition to individual-level clinical outcomes. This framework, which defines the role of a national team, informs plans to scale and disseminate CommonSpirit's approach.

CommonSpirit plans to apply network science to assess how its national team has coordinated with local teams to improve project implementation, to learn how local networks are developed,

and to assess strengths of local networks. This is related to the strategic aim of becoming a better community partner. Project and program design should start with considering larger context. Clinics should be designed with consideration for their community context. Providers are concerned with their patients. It is helpful for them to understand their patients' needs, how prevalent needs are within a patient population, whether they are accessing available resources to meet those needs, and which barriers to access they are experiencing. This knowledge helps practitioners to provide better care. Barriers to patients' self-identified needs are related to health behaviors. Understanding this encourages health care providers to become advocates to addressing community-level needs.

Community health workers' essential roles are as patient counselor and advocate. In addition, they serve as frontline links to community agencies and partners. They are able to identify needs and connect patients to community resources that address those needs. They are also able to inform clinical service providers about how to become better community partners. It is important for community health workers to understand their contributions to community health, and for other health care provider team members to recognize and value these contributions.

CommonSpirit thinks it is important to build local networks and collaborations to address social determinants of health. They are working to engage patients and assess their needs without medicalizing social needs. Local data combined with patient stories have been more effective than county-level statistics for engaging internal leadership and representatives of other community sectors. For example, an advocate addressing a local Chamber of Commerce about diabetes will be more effective sharing personal anecdotes and discussing barriers patients face in managing the condition, such as difficulty obtaining SNAP benefits, in addition to presenting prevalence statistics than in presenting only statistical data.

It is also important for program designers to understand factors that affect workflow and demands on program staff. Programs must have mechanisms for staff to understand and provide input about the work environment and demands. Dr. Evans said this is especially important when a national organization is providing input for local organizations. Planners also must acknowledge workflow and resource differences between health care and social service organizations. They must consider how work in the health care setting affects local resources. Sustainability planning must address the degree to which local capacity can meet needs for social services.

A Committee member noted it is important for social service agencies to be part of health care service agencies' anchor mission strategies. Health care service agencies should support social service agencies through recognition and reimbursement. Evaluation data from programs such as CommonSpirit should be used to advocate for this support. Dr. Evans concurred and stated community benefit funds and community partners can contribute to reimbursement for community health workers. She has observed effective implementation of this approach.

A Committee member stated that her Area Health Education Center (AhEC) is exploring certification for community health workers. She asked whether CommonSpirit has explored this, and how CommonSpirit is developing core competencies, with an initial set based on those developed by Sinai Urban Health Institute. CommonSpirit is collaborating with the National

Association of Community Health Workers on this. The group's work is informed by a recent article published in the *American Journal of Public Health* that discusses the broad range of focus areas for community health workers and what constitutes core competencies. The goal is to develop a national set of recommendations drawing from existing work, such as Colorado's certification program. CommonSpirit believes certification would be valuable to community health workers since it signifies achievement.

Dr. Kennedy thanked Dr. Evans and Ms. Duval for their presentations.

Presentation: Advancing Population Health through Health Information Exchanges and Informatics

Ellen Harper, DNP, RN-BC. MBA, FAAN, *Clinical Assistant Professor University of Kansas School of Nursing The University of Kansas Medical Center*

Dr. Kennedy introduced Dr. Harper as the Clinical Assistant Professor at the University of Kansas School of Nursing, University of Kansas Medical Center. Dr. Harper noted that current health professionals are the first to experience implementation of health information technology at point of care. Electronic medical information systems first focused on data entry. Users quickly recognized the advantages of computers over paper. Systems standardized documentation, added required fields, and built clinical decision support tools and alerts. Electronic records allowed opening charts from any location through a computer with proper security protections. A disadvantage was that changing practice required changing the computer system. For example, when CMS changed rules on advanced directives, it impacted workflow and reporting systems. Change made reporting more time consuming and labor intensive.

The current technology revolution includes rapid increase in the amount and types of digital information available, such as smartphones, internet-enabled home monitors, mobile health apps, and telemedicine. Technology assistants such as Alexa support using data to make decisions. Private industry has invested billions of dollars in health information technology (HIT) such as new apps, medical devices, and pharmacy services. Businesses such as Amazon, Berkshire Hathaway and J.P. Morgan are HIT investors. Google purchased Deep Mind, thereby acquiring access to health care data from three London hospitals.

The healthcare business model has changed with the emergence of precision medicine. Practice innovation should be grounded in evidence that changes will improve care quality and health outcomes. Innovation should have a purpose, however, it is also important to develop new ideas and invest in refining them. Bioinformatics can support use of data to develop effective innovations. The field of bioinformatics emerged in 1970. In 2012 the American Medical Informatics Association (AMIA) defined biomedical informatics as "the interdisciplinary field that studies and pursues the effective uses of biomedical data, information, and knowledge for scientific inquiry, problem solving, and decision making, motivated by efforts to improve human health." Bioinformatics is not simply the application of information technology; it can be used to develop clinical intelligence and analytics.

Dr. Harper noted that Americans take pride in having the best health care system in the world, but we do not. We have a sick care system that does not address a patient's needs until he or she is sick. Most health care systems have access to massive amounts of data but struggle to use it meaningfully. They have invested heavily in clinical intelligence and analytics to support key business decisions and processes. More complex data analysis leads to more utility and competitive advantage. Health information tools range from real-time alerts at point of care to stochastic optimization programming that supports probabilistic estimates of unknown variable values in order to support decision-making. Tools may be descriptive, predictive, or prescriptive. They support analyzing data to develop actionable clinical intelligence. Raw data provide information such as A1C test results. Knowledge is required to understand that a level greater than 6.5 is an indication of diabetes. Insight is required to understand that two such results indicate a diabetes diagnosis and need for treatment. Wisdom is required to know how to treat the disease and evaluate treatment outcomes. Technology does not replace judgment, but provides tools to assist clinicians. Technology developers must focus on how to support clinical wisdom with actionable data.

Electronic medical records have evolved into electronic health systems. They can include a broad range of health-related data and be linked with multiple community resources, including non-traditional health resources such as churches, grocery stores, and gyms, to support holistic patient- and family-centered care. They can include information gathered by interdisciplinary teams at primary and specialty practices. Electronic health systems may be implemented by accountable care organizations and patient-centered medical homes as part of a team-based delivery of comprehensive and continuous health and wellness care aimed to optimize health outcomes.

Health information exchanges allow health care professionals and patients to share information electronically and securely. Federal meaningful use requirements drive technological development of health information exchange. Exchanges require interoperability. Electronic health systems should be designed to reach beyond the organization that originally collected and compiled information. They should share digital information with entire care teams and information should be portable across clinical settings and times.

Dr. Harper presented an example of a data source system to support care coordination that she is developing with a team in Missouri. It manages data from laboratory systems, electronic health records, claims and payers, and pharmacies. This is expected for any health information exchange (HIE) system designed to support accountable care. Healthcare data are complex, stored in multiple places and in multiple formats, including text, numeric, and video. The same information may be stored differently, such as in different date formats or using different terminology conventions. Harmonizing these differences requires sophisticated tools, more than has been needed in any other industry. Dr. Harper presented results of a study conducted by the Missouri Hospital Association showing that semantic harmonization of interoperability remains a major challenge in the field.

Dr. Harper provided Kindig and Stoddart's (2003) definition of population, "an approach that focuses on interrelated conditions and factors that influence the health of the population over the life course. It identifies systematic variation and the patterns of occurrence and applied resulting

knowledge to develop and implement policy and actions to improve the health and well-being of those populations." The CDC is interested in the pattern of determinants of public health, including medical care, public health interventions, genetics, individual behavior, socio-economic factors, and the physical environment.

Dr. Harper gave evidence of need for a focus on population health. Between 2011 and 2015, the number of people covered by accountable care organizations increased from slightly more than 5 million to just over 23 million. This number is predicted to be approximately 105 million in 2020. The increase in the number of people covered by accountable care organizations is associated with an increase in at-risk contracts. This is because of Federal and State incentives and penalties, commercial insurers offering value-based contracts, a belief that this type of contract supports achievement of the Institute for Healthcare Improvement's triple aim of better individual care, better population health, and lower per capita cost, and the success of initiatives that include value-based care.

Dr. Harper presented summary data about predictors of health and health spending in the US. Healthy behaviors predict approximately 50 percent of variance in health outcomes, but are associated with only about 4 percent of health-related spending. While access to care accounts for approximately 10 percent of variance in health outcomes, about 88 percent of spending is on medical services. She noted that behavioral change is difficult and public resources to support policy and program interventions are more constrained than ever. Therefore, responsible leadership is needed. If behavior accounts for most health outcomes, understanding social determinants is critical for developing effective health interventions. Understanding can be improved by asking patients about their experiences with social determinants such as access to healthy food and adequate housing. The field must determine how to measure, collect, and standardize data relevant to health behaviors.

In 2018, HHS Secretary Alex Azar recommended giving consumers greater control over health information, encouraging transparency, using experimental models to drive value and quality, and removing government burdens. Dr. Harper noted that many value-based care models were initially pilot projects tested through CMS. They are increasingly viewed as the model for the future of healthcare nationally.

Issues with plan participation and data use agreements necessitate multiple forms of data exchange for systems to be interoperable. Addressing these issues to create interoperable systems is expensive, but necessary for developing efficient health information exchange. Some exemplars exist. Mercy Virtual Hospital in St. Louis is a four-story building from which 330 healthcare professionals deliver telehealth services across multiple States. There are no patients in the hospital. Highly sensitive cameras and real-time vital sign checking allow professionals to see patients virtually. Patients may consult Mercy Virtual providers from another Mercy hospital, a physician's office, or their own home. Kaiser, in California, Oregon, and Washington, now treats more patients virtually than in-person. Some studies predict that the US telehealth market will reach nearly 160 million people by 2024. Corporations are investing billions of dollars in digital health. In 2018, $9.5 billion was invested in digital health. Investments are mostly in start-up companies. This trend allows patients to get care on their own terms rather than on terms dictated by healthcare systems.

Dr. Harper described "disruptive healthcare." She gave an example that occurred in rural Kansas. The area had two critical access hospitals, about 20 miles apart from each other. Both were failing and about to close. Community members obtained funding from the Neil Patterson Foundation and collaborated to build a new 60-acre campus organized around community engagement, and designed to improve health for the entire county. It is scheduled to open the summer of 2019. The community focuses on accessibility and affordability. Their motto is "Eat well, get well, and stay well." The campus is designed to support all of these. It includes a hospital and care team delivery model for primary and specialty care providers and is designed to "meet people where they live." The focus is to keep people healthy and to support aging in place. A community needs assessment survey indicated that respondents did not want to have to drive to Kansas City to get health care.

Dr. Harper presented recommendations and emphasized that these recommendations are based on her individual experiences and are not made on behalf of the University of Kansas School of Nursing. The first recommendation is to prioritize implementing patient- and family-centered care. Patients, not providers, should own their healthcare data. They should have access to electronic data, possibly stored in the cloud. Dr. Harper noted that data storage has become less expensive over time. She said that patients should decide who has access to their health data and be able to check those data for accuracy, just as people can check accuracy of financial and credit data. Systems also should focus on "adherence" rather than "compliance." This will encourage providers to determine why patients are not following recommendations and to develop plans that patients can and will follow. Dr. Harper said that it is useless to develop care plans that patients will not follow.

A Committee member inquired if Dr. Harper would recommend developing a nationalized database on electronic health records. Dr. Harper said that is not currently feasible, but that it would be useful to develop national interoperability standards. This would include semantic harmonization and giving patients control of their own data.

This same Committee member reported that her AHEC requires all trainees to take a course in clinical informatics because it is an essential competency for clinicians. She said that clinicians should know how to use HIT. Her program has found that HIT developers often do not understand the perspective or experiences of clinicians. Electronic health record formats reflect lack of understanding of clinical workflow. The program has assigned an informatics master's degree program student to work with clinical students to learn their data analysis and reporting needs. This will inform design of EHRs that facilitate efficient and effective practice. Interdisciplinary collaboration has mostly focused on collaboration among health professionals. It should now include professionals in statistics, informatics, and computer science. This will support optimization of electronic health systems. Dr. Harper was asked if she was aware of existing collaborative groups representing these disciplines and if she had thoughts about how the Committee could develop recommendations about applying the information in her presentation to population health, as work in population health requires high-quality data. Dr. Harper responded that the University of Kansas established an Interprofessional Center for Health Informatics. Students learn in interdisciplinary teams. The team must have an understanding of workflow, data, and processes, which requires multiple disciplines. She added that more work is necessary for defining informatics competencies. Dr. LaVerne Manos at the

University of Kansas is working in this area. Dr. Harper was asked if these competencies are being defined across health professions then integrated into training and she reported that is the case. Dr. Teri Kennedy stated Dr. LaVerne Manos is part of a group that has developed national informatics competency standards with an interprofessional focus.

Dr. Harper's second recommendation is to develop a unique national identifier for patients. She reported that 18 percent of health systems have duplicate patient records. Commonly used identifiers such as birth date and address are not good. The current best identifier is the cellphone number. Biometric technology such as retina scans, vein scans, and fingerprints could be used as unique identifiers, like a social security number for healthcare. In addition, using provider biometrics rather than usernames and passwords would allow faster access to patient records.

Dr. Harper's third recommendation is that systems should facilitate patient-provider communication beyond what is currently available through patient portals. She also recommended developing clear policies regarding privacy, practice, and security. Healthy People 2020 considers consumer engagement with their HIT to be crucial for improving health outcomes, care quality, and equity. In addition to engaging patients through portals, providers also can use social media and mobile health technology, which are currently underutilized. She added that HIPAA privacy rules address use of personal health information in e-mail, but not text messaging or social media. In the absence of clear guidelines, providers tend to avoid using a communication channel, which may mean losing crucial opportunities. Many patients and their families would prefer to use these channels.

Patient consent requirements vary by State. Multi-State health systems must use health information exchange systems that address this variation in order to coordinate care. Protections vary regarding information related to genetic disorders, sexually transmitted diseases, substance abuse history, and more. Dr. Harper recommends removing State boundaries that apply to patient consent. She said the focus seems to be on liability protection rather than on meeting patients' needs.

Dr. Harper's fourth recommendation is to make current standards for interoperability required, rather than optional as they are now. Standards will continue to evolve. The field should not wait for a final version before establishing requirements. In addition, the field should reduce regulatory burden and re-documentation. Increased interoperability will facilitate additional development.

Dr. Harper's fifth recommendation is to change our paradigm for HIT. HIT and bioinformatics should be considered direct patient care. It is no longer possible to practice healthcare without a computer. Electronically recorded health information should not be considered only a "record." It should be considered an evolving system. This shift in conceptualizing will require leadership. It will require changes in policies and technical approaches, but also in perception among the general public.

Drs. Harper and Kennedy invited questions. A Committee member asked if HIE improves capacity for collecting and utilizing outcomes data. Dr. Harper said this is an emerging area in

need of development. Dr. Harper has been studying cost and value of care team members using digital "crumbs" left by users when they log in to a computer.

Another Committee member stated she recently completed a study of usability and the importance of HIT to patients. She asked Dr. Harper to share thoughts about patient and caregiver involvement in HIT and HIE design. The Committee member also noted that pharmacists can be important members of design teams, but are often not included. It took nearly 5 years for pharmacists to gain access to Maryland's HIE. This Committee member now advocates nationally for pharmacists to have HIE access. She asked if Dr. Harper agreed that this is important. Dr. Harper agreed and noted that it could be useful to use incentives for implementing interoperable health information systems, such as meaningful use requirements, to encourage input from patients and caregivers.

A Committee member noted that that electronic medical record systems are very expensive to develop and implement. Vendors often make false promises about the systems they sell. Buyers have to pay for computer programs to develop solutions to problems in multimillion dollar systems. As Chief Medical Officer at the Community Health Center Association of Connecticut, which uses seven different EHRs, this Committee member has observed that it has cost millions of dollars to try to make the EHRs interoperable. He said that clinicians sometimes find it difficult to extract data in a usable format, which can cost lives. He asked how Dr. Harper would define a threshold for Federal intervention to hasten interoperability and usability and if she was aware of solutions being developed that can be implemented in the near future. Dr. Harper stated the problem has multiple causes. She believes clinician input on what would make systems more usable is the factor most likely to encourage a solution, and that it is vital to solve this problem.

A Committee member noted that President George W. Bush's Health Secretary said that EHRs would lead to major change in healthcare. The Secretary said that there needs to be one national system, not many. He agreed that the US must find a way to have a single national interoperable system.

Dr. Weiss said she agreed that patients should own and control access to their electronic health data. She cautioned that many underserved patients who live in poverty in rural areas do not have access to computers that will allow them to access and share data. In addition, older adults often struggle with using technology. These limitations must be considered when developing HIT and HIE. Dr. Harper agreed.

Dr. Kennedy thanked Dr. Harper for her presentation.

Presentation: Ethics Update
Laura Ridder

Dr. Kennedy introduced Ms. Laura Ridder, HRSA Ethics Advisor. Ms. Ridder welcomed the Committee. She asked if any members had initial questions. None did. Ms. Ridder asked whether the training video provided helpful guidance. Committee members indicated that it had.

She asked whether Committee members had been able to receive and send their forms through the electronic filing system, and whether the system had been easy to use. Committee members stated they had used the system without problems. Ms. Ridder was asked if it would be possible to update preloaded previous forms rather than submit new forms annually. She responded that in the future the forms will be sent with previously submitted information attached. HRSA will still need paper forms signed in ink. The forms inform HRSA about the guidance Committee members need from the agency. They are intended to prevent ethical problems, not enforce regulations.

Committee members are considered Federal employees while they are working at HRSA. They are representing the Federal government, not their regular employers. They are offering their experience and expertise as individuals, not as employees of any organization.

Ethics statutes are also criminal statutes. The main statute for Committee members to be aware of is the one the one regarding conflict of interest. Committee members cannot perform Federal government work that affects their own financial interests or what would appear to be their financial interests. Ascribed or imputed interests include those of a spouse, minor child, a general partner, or any organization for which a member serves as an officer, director, trustee, or employee. This is the purpose of Part 3 of the required ethics form. This work does not include Committee service. Members often mistakenly think they must report Committee activity as an outside position. The form is for reporting work outside of Federal service, including primary and prospective employment. Holding mutual funds does not constitute a conflict of interest. Holding more than $15,000 in securities in an interest affected by Federal work constitutes a conflict of interest when specific policy matters are concerned. Holding more than $25,000 in securities in an interest affected by Federal work constitutes a conflict of interest when general policy matters are concerned. For Committee members who work at multi-campus academic system, the multi-campus exemption will not apply if the Committee member holds more than a $25,000 (usually bond) interest in the university, regardless of the campus where they work. They may receive a waiver if the Federal government's need for an individual person's services outweighs the risk of potential conflict of interest.
Ms. Ridder reviewed the standards of ethical conduct. Members must be impartial. They may not use their position for private gain, to endorse products or services, to coerce benefits. They may not accept gifts that are given because of their Committee membership. They cannot give gifts worth more than $10 to an official superior except on special, infrequent occasions. They cannot base non-Federal work on confidential data or ideas.

The following questions were asked of Ms. Ridder:

- should Committee members report all exempt teaching engagements. Ms. Ridder said only if it is not part of their regular duties to their employers. Any consulting duties conducted for an employer, including a sole proprietor LLC, do not need to be listed separately from reporting employment.
- are Committee members required to report travel compensation. Ms. Ridder responded they are not; they are only required to report honoraria and speaking fees. She said that ethics advisors are always available to answer questions.

Ms. Ridder reminded the Committee that the Hatch Act applies to members when they are working for the Federal government or on Federal property. The purpose of the Hatch Act is to prevent political coercion of Federal employees.

Ms. Ridder noted that Federal employees may not accept gifts worth more than $390 from foreign governments or organizations, except to cover travel occurring entirely outside the US. They cannot act as a principal or lobbyist on behalf of a foreign entity.

A question was asked if international committee work is exempt and noted that members of the international committee would be asked to advocate for policies. Ms. Ridder said this would be acceptable if the ACICBL member was not representing a Federal advisory committee while advocating, was not being paid by the Federal government at the time of conducting advocacy activities, and did not use his/her Federal advisory committee membership to bolster his/her position with the international committee. She said the main point of the regulation is to prevent members from attempting to influence foreign governments on behalf of the US government.

Ms. Ridder stated that Committee members cannot represent a third party mentioned during meetings after their Committee tenure ends. They cannot solicit support from any organization that could be affected by Committee work.

Presentation: Update on the Area Health Education Centers (AHEC) Program
Jacqueline Rodrigue, MSW, Captain, US Public Health Service, Director, Division of Health Careers and Financial Support (DHCFS), BHW, HRSA
Lorener Brayboy, MSW, LICSW, LCDR, US Public Health Service, Public Health Analyst, Health Careers Pipeline Branch, DHCFS, BHW, HRSA
Aleisha Langhorne, MPH, MHSA, MDiv, Public Health Analyst, Health Careers Pipeline Branch, DHCFS, BHW, HRSA

Dr. Kennedy introduced the presenters from the Division of Health Careers and Financial Support under HRSA's Bureau of Health Workforce: Division Director CAPT Jacqueline Rodrigue, and Public Health Analysts LCDR Lorener Brayboy and Aleisha Langhorne, from the Health Careers Pipeline Branch.

CAPT Rodrigues provided an overview of the AHEC program. The program was established in 1971 under authorization of Section 751 of the Public Health Service Act. It is within HRSA's Division of Health Careers and Financial Support. Its purpose is to build education and training networks within communities, academic institutions, and community-based organizations. It enhances access to high quality, culturally competent health care through academic-community partnerships.

LCDR Lorener Brayboy discussed AHEC reach and impact. Currently, there are 49 AHEC programs, 46 in medical schools, three in schools of nursing. There are 261 AHEC centers, which are the foundation of the program. These centers conduct education and training activities for students and practicing professionals. They are located in 46 States and the District of Columbia, Guam, and the Republic of Palau. The program operates at more than 5,000 clinical sites. Its Federal budget appropriation for fiscal year (FY) 2019 is $39,250,000. The program has trained about 3,000 students from disadvantaged backgrounds. Increasing diversity in the

health workforce, especially in underserved areas, is a program priority. Enhancing healthcare quality in these areas is also a priority.

Ms. Aleisha Langhorne stated that AHEC aims to lead innovation in public health, medicine, and primary care in rural and underserved communities. This year HRSA collaborated with the National Library of Medicine to contribute to a book on health literacy innovation. This book is scheduled for publication in Fall 2019. HRSA developed a chapter entitled "Preparing a Health Workforce, the Role of AHEC." The chapter highlights the AHEC programs in Wisconsin, Kentucky, and Massachusetts. The Wisconsin AHEC trains community health workers on health literacy and on how they can contribute to integrated healthcare teams. The Kentucky AHEC is developing a health literacy universal precautions toolkit. The Massachusetts AHEC focuses on advancing the work of medical interpreters.

AHEC has a history of being at the forefront of public health crises, as it currently is with the opioid crisis. In FY 2019 grantees had the opportunity to apply for one-time supplemental funding to address the opioid crisis. Funding could be used to build capacity in tele-mental health, behavioral health integration, or community health worker training focused on substance abuse. Applicants could propose plans to increase access to treatment, to increase seeking early access to treatment, to increase trainees' knowledge about patient engagement in treatment and recovery, to increase utilization of specific substance use assessment tools and treatment options, to provide training on patient and family education, and to conduct outreach in community-based settings.

HRSA requires AHECs to provide all participants with training and education in six core topics. This requirement is intended to intensify the national impact of the AHEC program. These core topics are: 1) interprofessional education, 2) behavioral health integration, 3) cultural competency, 4) practice transformation, 5) current and emerging health issues, such as the opioid crisis, and 6) social determinants of health. Many grantees have created curricula on the social determinants of health. Centers offer interdisciplinary experiential community-based primary care training in rural and underserved areas. This includes developing community service projects and quality improvement initiatives. The AHECs enhance clinical clerkship and field placement opportunities for students, and prepare students to be change agents in promoting primary prevention.

The Bureau of Health Workforce aims to strengthen the AHEC program through building Federal Partnerships with the Bureau of Primary Healthcare. This is the first year that grantees are implementing a new AHEC program design, featuring improved coordination between program offices and centers. Program offices are implementing statewide evaluation and curriculum development of the AHEC scholars' program. The program has expanded capacity to provide interprofessional education on patient-centered models of care. It has increased access to new partners and leveraging of resources. Strategic partnerships have expanded. The goal of the redesigned AHEC is to ensure a paradigm shift among clinicians and other health professionals so that they serve as change agents promoting primary prevention. To support this goal, HRSA's project officers have increased the technical assistance and guidance they provide to grantees about monitoring work and disseminating information. HRSA has offered webinars

on program work, such as strategic partnerships and the scholars' program. This support is designed to maximize program impact.

Ms. Langhorne stated that the AHEC scholars' program's goals align with the Committee's focus areas. The program started this year. The Scholars' Program has been implemented in 45 AHEC programs. Programs offer training in more than 50 disciplines including medicine, dentistry, public health, nursing assistant, community health work, licensed practical nursing, HIT, medical coding, and medical laboratory technician work. Students learn while working in the field. Many sites have reported that an overwhelming number of students would like to participate in the program.

AHEC programs developed a didactic curriculum that some health professional schools now offer for academic credit. The Scholars' program professional training experiences prepare the future health workforce to be change agents and to address social determinants of health. Examples of training experiences include conducting home visits to better understand patients' perspectives and the obstacles to health care access they experience. Budget constraints have presented a challenge for the AHEC program. Program cohorts are increasing. Regional center capacity varies.

Ms. Langhorne stated representatives from the West Virginia, Connecticut, North Carolina, and Morehouse School of Medicine AHECs would describe their experiences with the scholars' program. These presenters are members of the ACICBL and include Ms. Pope, Dr. Gould, Ms. Wynn, and Dr. Erwin, respectively.

West Virginia AHEC
Sandra Pope
Ms. Pope discussed the West Virginia AHEC. The program is pleased with its 94 percent scholar retention rate. She attributes this to the program's stringent application process that screens for dedication to rural health. Students' evaluations indicate that their experiences have prepared them to work in rural communities. They have learned about the communities and how to work with them, rather than just being exposed to clinical settings. Students report that community engagement has solidified their dedication to rural health. Even students from rural communities have said the program has taught them new things about those communities.

Last year the program developed four online educational modules. They are in the process of developing six more modules for this year: 1) addiction and rural communities, 2) rural health leadership, 3) veterans in rural healthcare, 4) substance use disorders, 5) pregnant and parenting women, children and families, and 6) community-based chronic disease prevention. In addition to completing modules, students have a 2- to 4-day rural immersion experience that includes activities such as going into a coal mine to meet with coal miners, or buying groceries and preparing meals with an allowance under the Supplemental Nutrition Assistance Program (SNAP). Ms. Pope said the center's biggest challenge is the time and money required to build the program.

Connecticut AHEC
Bruce Gould

The Connecticut AHEC was established in 1996. It has offered an urban service track for scholars for about 12 years, with 180 students participating annually. The AHEC offers training in medicine, nursing, pharmacy, dentistry, social work, and a program through the Veterans Affairs (VA) hospital. It teaches care of underserved populations with emphasis on these populations' experiences and perspectives. Students participate in four retreats annually. Each retreat includes focus on a specific topic such as HIV, children's issues, substance abuse, or geriatric issues with a focus on the needs of priority populations.

Students in the VA program learn to deliver quality care to veterans. Their training involves talking with veterans and primary care professionals at the VA hospital.

The Connecticut AHEC offers more than 60 outreach events annually. Events are led by interprofessional teams, always representing at least two disciplines. Second year students participate in a series of "leadership cabinet" meetings to discuss leadership skills with mentors. Students learn about social determinants of health through case presentations.

Experts train students how to screen, intervene, and offer referrals for patients with issues such as substance abuse or grief. Then students have the to opportunity to implement these skills with standardized patients. This allows instructors to assess students' understanding and skills.

The program recently designed an intervention for treating caregiver burnout, which is prevalent among caregivers of geriatric patients. Clinicians often treat patients without assessing the needs of patients' caregivers. The intervention aims to change this.

Connecticut AHEC offers a clinical boot camp to ensure students are ready to serve priority populations. Approaches include field training in serving migrant farm workers within the first week of medical school. Some programs offer field boot camp training in skills such as blood pressure and blood sugar screening to undergraduate students. This allows students at the earliest phases of training to be of service rather than just observe.

North Carolina AHEC
Jacqueline Wynn

The North Carolina AHEC was established in 1972. It has nine offices and a site at Duke University. Currently, 128 scholars are enrolled. Strategic partnering is a critical element of the AHEC's work. A statewide advisory committee coordinates all activities. A regional advisory committee leads regional implementation, including recruitment of students and faculty. An April strategic partners meeting with scholars focused on encouraging and preparing State institutions to recruit from that cohort of scholars, and on encouraging scholars to consider post-graduate education. All five medical schools in North Carolina were represented at the meeting.

The program offers a cultural bus tour so that students experience being in a rural or underserved area. It offers nutritional and obesity education modules that include instruction on simple cooking from a chef. Many scholars report that this is a program highlight. Scholars at the strategic partners meeting also reported that they appreciate the opportunity to participate in interprofessional, inter-institutional training.

The North Carolina AHEC has offered online courses. But scholars often prefer face-to-face interactions. The program tries to accommodate this preference. Offering training sessions on Saturdays has allowed scholars from multiple schools to meet without missing other classes.

The program's retention rate is about 88 percent. Ms. Wynn stated that retention is affected by personal and family challenges. Students find it challenging to add 40 hours of clinical experience and 40 hours of didactic training to other academic requirements.

The program is planning a retreat with staff and a scholar representative from each center to obtain input on program planning for the coming year, during which the program will train two cohorts of scholars.

Morehouse Regional AHEC
Katherine Erwin
Dr. Erwin reported that the Morehouse Regional AHEC recently formed a partnership with the Georgia statewide AHEC. The AHEC formed an interdisciplinary team of physicians, a dentist, a pharmacist, a nurse, an evaluator, a social worker, and a State government representative to offer a train-the-trainer professional education program. Information developed for this program informed development of a curriculum for training faculty in core interprofessional competencies, thus strengthening program infrastructure.

The program resulted in formation of the Georgia Interprofessional Curriculum Advisory Committee, which meets monthly to provide continuing education for faculty and preceptors. The Committee also trains the AHEC center director and staff. Dr. Erwin said education activities include team building exercises and lessons about conflict resolution and program evaluation, with a focus on improving trainees' engagement with interprofessional education.

The program offers training in serving migrant farm workers three times annually. Students in this training spend 40 hours in the field. The program serves a large number of patients and provides referrals to follow-up services with a network of 330 community centers. Program students sometimes follow patients to ensure they received the services to which they were referred.

The program offers telehealth and teleconferencing. Some institutions offer simulation labs. Centers have provided education on obesity and nutrition, informatics, and opioids. AHECs meet twice monthly via video conference to discuss their activities and potential collaboration. The program offers an educational module on interprofessional education which faculty have said is very helpful.
Dr. Erwin stated that students prefer to learn face-to-face through interactive activities. It is expensive to convene students in one location. Video conferencing is a less expensive approach that accommodates students' preferences.

CAPT Rodrigue thanked the AHEC leaders for their presentations. She said she was confident that the AHEC program and scholars will change the healthcare landscape, and thanked leaders for their work. Dr. Weiss also thanked presenters for their presentations and work in the AHEC program.

Presentation: Update on Behavioral and Mental Health Programs
Alexandra Shabelski, Deputy Director, Division of Nursing and Public Health (DNPH), BHW, HRSA
Patsy Cunningham, MA, NCC, LCPC, Chief, Behavioral and Public Health Branch, DNPH, BHW, HRSA

Dr. Weiss introduced the presenters Alexandra Shabelski, Deputy Director of Division of Nursing and Public Health in HRSA's Bureau of Health Workforce, and Ms. Patsy Cunningham, Chief of the Behavioral and Public Health Branch within the same Division.

Ms. Cunningham stated that the Bureau of Health Workforce (BHW) helps to address the need for integrated behavioral healthcare in primary care settings. Integrating mental health services into primary care settings is a promising approach to increase access to mental health services. It contributes to improved health outcomes, decreases health risks, and lowers healthcare costs. The Behavioral and Public Health Branch offers three behavioral health education and training tracks: 1) Behavioral Health Workforce Education and Training for professionals (BHWET), 2) BHWET for paraprofessionals, and 3) graduate psychology education. The first track offers a $10,000 annual stipend for master's level students and a $28,352 stipend for doctoral students. In FY 2017 the Branch invested $45 million to fund 136 grantees supporting this track.

The Behavioral Health Workforce Education and Training (BHWET) Program for paraprofessionals is a certificate-focused program. In FY 2017, 132 grantees were funded, 20 of which are current grantees. The program started in FY 2014 in collaboration with the Substance Abuse and Mental Health Services Administration (SAMHSA). The graduate psychology education program supports 32 programs, which were funded in FY 2016. Doctoral students receive $25,000 annual stipends; interns' annual stipends are $28,352; and post-doctoral residents' annual stipends are $44,556. All programs are all accredited by the American Psychological Association and focus on clinical psychology.

The BHW prioritized addressing the opioid crisis in FY 2018 and 2019. In FY 2018 $8 million was awarded to fund 21 grantees to provide professional and paraprofessional training on treating opioid abuse disorders. BHW trains potential members of the healthcare workforce. HRSA's Bureau of Primary Healthcare employs members of the healthcare workforce. Training efforts have included support for trainees who have Drug Abuse Treatment Act (DATA) waivers and training in medication-assisted treatment which increases the workforce qualified to support substance abuse treatment recovery. In September 2019, the Opioid Workforce Expansion Program (OWEP), which will support training for professionals and paraprofessionals, will begin. Grant applications were due May 7, 2019. The program is similar to BHWET, but with a focus on opioid use disorders. BHW plans to fund 33 paraprofessional OWEP and 29 professional OWEP grantees.

Grant applications also were due to the Graduate Psychology Education Program by May 7, 2019. The program supports doctoral training, doctoral internships and post-doctoral residency. Programs are required to focus 25 percent of time on opioid use disorder. BHW plans to fund 40 GPE grantees.

Dr. Weiss thanked presenters for their presentations. Ms. Cunningham thanked Dr. Weiss for the opportunity to present.

Presentation: Update on Advisory Committee on Primary Care Medicine and Dentistry (ACTPCMD), Council on Graduate Medical Education (COGME)
Kennita Carter, MD

Dr. Kennedy introduced Dr. Kennita Carter. Dr. Carter is a Senior Advisor in HRSA's Division Of Medicine and Dentistry and the Designated Federal Official for the Advisory Committee on Training in Primary Care Medicine and Dentistry (ACTPCMD) and the Council on Graduate Medical Education (COGME). Dr. Carter said she would provide an overview and updates on ACTPCMD and COGME, the other two advisory committees in the Division of Medicine and Dentistry.

ACTPCMD advises and provides recommendations to the HHS Secretary and Congress. The Committee makes recommendations to the same Senate and House of Representatives committees to which ACICBL makes recommendations. Recommendations are regarding appropriations, and programs authorized by Title VII Section 747, which concerns primary care medicine, and Section 748, which concerns oral health. The purpose of Section 747 is to increase medical students' exposure to primary care medicine and pediatrics through community-based and longitudinal experiential education that encourages progress to primary care residencies and practice in geographically isolated and medically underserved urban areas. The section also supports graduate medical education in family and internal medicine, as well as physician assistant training. Section 748 supports training for dental hygienists, pre- and post-doctoral dental education, and residencies in dentistry, including pediatric dentistry. ACTPCMD members represent all of these professions and other primary care team professions, such as advanced practice nursing. Dr. Carter stated the Committee currently is recruiting candidates in social work, clinical pharmacology, and clinical psychology.

The most recent ACTPCMD meeting was held in January 2019. The National Advisory Council on Nursing Education and Practice (NACNEP) participated in this meeting. The ACTPCMD and NACNEP discussed how to align the programs better through joint funding opportunities that support better interdisciplinary integration. In addition, ACTPCMD is focused on innovations in primary care and oral health. Dr. Carter invited questions and comments, which are reported below.

- Dr. Carter confirmed that the ACTPCMD prioritizes training and practice in population health. The topic has been discussed, however, not in detail.
- Dr. Carter stated she would welcome nominations to the ACTPCMD. She invited Committee members to contact professional organizations to which they belong to inquire about potential nominees. She asked members to be prepared to write letters of recommendation for individual candidates that they recommend.

Dr. Carter noted that Congress first authorized COGME in 1986 and has reauthorized it annually since. COGME advises the HHS Secretary and Congress on matters concerning the entire US physician workforce- across all specialties and geographic regions. These matters include supply and distribution of physicians and financial policies. Issues have included curriculum evaluation,

financing undergraduate medical education for osteopathic and allopathic medical schools, and financing graduate medical education. COGME provides advice about the physician workforce to the public, hospitals, and medical schools. Dr. Carter noted that the Federal government cannot enforce Council recommendations. Congress specifies that COGME must comprise a practicing primary care physician and representatives of resident and medical student organizations, international medical school graduates, public and private teaching hospitals, health insurers, business, and labor.

COGME's most recent report was on developing a strategic plan for COGME. Recommendations included the US DHHS developing a national strategic plan for graduate medical education. To accomplish this, HHS should recruit an independent, ad hoc, non-partisan strategic planning committee, which should be funded publicly through HHS, privately through philanthropic support, or jointly through a consortium of public and private stakeholders.

COGME will meet on June 5 and 6, 2019 to discuss the rural healthcare workforce. Previous reports have been on physician assistants, nurse practitioners, and other clinicians and healthcare professionals. Federal members of COGME include the Department of Veteran Affairs representative Dr. Monica Lypson, Centers for Medicaid and Medicare (CMS) representative Miechal Kriger, and the Office of the Assistant Secretary for Health representative Dr. Leith Stakes, a preventive medicine physician.

An inquiry was made as to whether COGME has discussed current problems with funding academic medical centers. Dr. Carter said there has been extensive discussion. The Institute of Medicine and others have made recommendations for funding graduate medical education over a period of years. It is a controversial topic. The Council's current emphasis is on analyzing the rural health workforce needs in terms of community needs. The next meeting will focus on which investments in rural communities are needed rather than on how much money is needed for graduate medical education. Dr. Carter noted the next discussion at the COGME meeting will include the topic of population health. She invited Committee members to offer public comment during this meeting. A Committee member noted that strategies to make rural health service appealing have been effective.

A Committee member noted that chiropractors are trained as primary care professionals in diagnosis and assessment, and do everything that physician assistants and nurse practitioners do. They have training in pediatrics, geriatrics, gynecology, and obstetrics. About 40 to 50 percent of chiropractors work in rural underserved areas and have the potential to address rural communities' needs. Of note is that they do not have access to interprofessional care training programs. Dr. Carter recommended that this issue be raised during the public comment period at the next COGME meeting. Dr. Carter said chiropractic care is an option for addressing chronic pain that could help alleviate the opioid epidemic.

A Committee member stated that regional centers are an important mental and physical health care resource for rural areas. He noted that Nebraska has 521 incorporated cities, towns, and villages with a median population of 316. About 260 towns and villages have a population of fewer than 316 people. A population of 20,000 constitutes a large town. This presents a challenge for providing adequate access to health care since it is nearly impossible to recruit a

physician to a very small town. It was suggested that regional centers can be a solution and it would be useful to further develop to address rural health needs. Consideration should be given to having doctoral clinical psychologists in every town with a population of at least 2,500.

Dr. Carter noted that rural healthcare providers have a broader scope of practice than urban providers because of the lack of specialists. She invited comment from the Committee. A Committee member mentioned that deploying enough providers to areas in need is as much of an issue as training enough providers. Being able to offer the practice scope needed by the community is a common challenge. This should be a HRSA focus. Dr. Carter agreed but said that full practice authority is a State policy domain. The Veterans Administration can supersede State authority to give full practice authority to nurse practitioners, but HRSA cannot. Dr. Carter stated that HRSA can work with States to help them understand their residents' needs for health care and to develop strategies for meeting those needs.

A Committee member discussed, that through his 30-year career, it has been difficult to encourage people to pursue careers as primary care providers. Even physician assistants and nurse practitioners are specializing. In his role as Associate Dean for Primary Care at the University of Connecticut, he is working to encourage specialists and primary care providers to collaborate and work as a balanced team. It would be helpful for Federal agencies and COGME to consider how policy can encourage people to become primary care providers by addressing economic and other types of factors that influence health care providers' career decisions. Changing who is admitted to training programs may help to address this problem. Dr. Carter agreed. She said that COGME's recommendation to develop a national strategic plan was intended to engage professionals who could provide advice regarding needs and how to address them. A Committee member pointed out that all countries with documented better health outcomes than the US have many more primary care providers. This is due to government policies. He said the Federal government must recognize the need for more primary care providers, invest in training these providers, and prioritize training primary care providers over training specialists. Policies must support increasing the number of advanced practice nurses and physician assistants, and deploying them to communities where they are needed. This will require treating these professionals with respect, supporting access to telehealth, and providing adequate compensation. Without these changes, need for rural health care will not be adequately met. Dr. Carter said these recommendations will need bipartisan support from Congress, from the communities in need, and from professional communities. She said there is broad awareness of the need for more primary care providers but also concerns about how change will affect stakeholders. Dr. Carter stated that it would be helpful for advisory committees to identify how to shift conversations about this issue to a focus on service and other messaging that will help to engage stakeholders and encourage investment in the changes needed.

A Committee member made an inquiry about how tribal healthcare systems should interact with Division programs. Dr. Carter said it would be helpful for Indian Health Service to be represented at the next COGME meeting. She said COGME has much to learn about this issue. Some tribal communities want to operate their own programs while others rely on Indian Health Service. Several tribal organizations would be happy to provide information to COGME. A list could of potential presenters as well as information about culturally specific adaptations of fundamental health care information could be provided. Dr. Carter invited the Committee

member and others to participate in public commentary, via telephone, written communication, or attending in-person, at the next COGME meeting, since the agenda is full and it would be better not to wait to initiate discussion. She reminded the Committee that the upcoming COGME meeting will focus on rural health, so this should be the focus of commentary. She asked to be notified of any in-person participants 7 to 10 days before the meeting so that participants can complete the security clearance process required before entering the building.

Presentation: Update on Division of Medicine and Dentistry
Joan Weiss
Dr. Weiss conveyed greetings from the Division's Acting Director, CAPT Daniel Coviello. She explained that the Division has three branches: graduate medical education, oral health, medical training and geriatrics. The Graduate Medical Education Branch supports the Teaching Health Centers Program (THC) and the Children's Hospital Graduate Medical Education Program (CHGME). The CHGME focuses on training the pediatric physician workforce. The THCs are designed to train medical residents in community-based settings. The Oral Health Branch supports training for the oral health workforce, including pediatric, general, and public health dentists, and dental assistants. The Medical Training and Geriatrics Branch offers programs to support primary care training and enhancement, the integration of behavioral health and primary care, as well as medical student education, and physician assistant training. This year the oral health branch is supporting only program continuation, not new competitive grants.

The Geriatrics Academic Career Awards program was authorized in 1998 by the Health Professions Partnership Act. Its purpose is to promote the career development of academic geriatrics specialists. Eligible disciplines include medicine, dentistry, nursing, social work, psychology, pharmacy, and allied health. HRSA plans to award 26 grantees a total of $2 million starting September 1, 2019.

The Geriatric Workforce Enhancement Program's (GWEP) develops a health care workforce that maximizes patient and family engagement and improves health outcomes for older adults by integrating geriatrics and primary care. Applicants may apply for up to $750,000 each year for 5 years. Grantees are required to develop reciprocal partnerships with academic institutions, primary care delivery systems, and community-based organizations with the purpose of providing value-based, patient- and family-centered care that improves health outcomes for older adults. The program supports training across the educational continuum including patients; families; caregivers; the direct care workforce; health professions students, faculty, practitioners; and geriatrics specialists. Required topics include chronic disease, self-management, long-term care, mental health, social determinants of health, telehealth, and population health. Grantees must transform local training environments into age-friendly integrated geriatrics and primary care systems. The program also supports community-based programs for patients' families and caregivers, with training on dementia. Grantee recipients are also required to link their education and training activities to an improvement in standardized performance measures.

Discussion: 17th Report
Drs. Weiss and Kennedy thanked the writing committee and Ms. Das for their work on the report. Dr. Kennedy asked if the Committee had comments or suggested edits. Dr. Weiss asked all members to check their contact information for accuracy and to send corrections to Ms. Das.

The Committee made comments, edits, and recommendations to strengthen the report. Most revisions were made during the meeting.

The plan is to finalize the report and send it to the HHS Secretary and Congress.

Public Comment
Dr. Weiss invited public comment and there was none.

Dr. Weiss adjourned the meeting at 5:00 p.m.

Day 2-May 17

Introduction

Dr. Weiss opened the meeting to order and took attendance. All members were present in-person or via telephone, excluding Dr. Geraldine Bednash and Dr. Nicole Brandt. Dr. Kennedy welcomed the Committee and asked members to confirm their contact information on the roster or send any corrections to Ms. Robinson.

Presentation: Bureau of Health Workforce (BHW) Update

Luis Padilla, MD, FAAFP, Associate Administrator of the Bureau of Health Workforce, HRSA

Dr. Weiss introduced Dr. Luis Padilla as HRSA's Associate Administrator of the Bureau of Health Workforce (BHW). Dr. Padilla explained that BHW ensures access to high quality care for communities struggling to meet their health care needs by:

- Supporting over 40 programs, including graduate training programs.
- Funding health professions trainees to pursue primary care careers in rural and underserved communities through scholarship and loan repayment programs, and supporting institutions that provide low-interest loans to students who provide primary care in medically underserved communities.

Dr. Padilla explained how BHW priorities aligned with HHS priorities for FY 2019-20 in behavioral health, substance abuse disorder, and value-based care, and added that BHW prioritizes training in patient-centered, team-based, interprofessional environments. He detailed how BHW is leveraging workforce data in different programs and explained how BHW is externalizing performance data for the first time via the National Center for Health Workforce Analysis and National Practitioner Data Bank. Next, Dr. Padilla mentioned that five advisory councils in BHW advise on all HRSA programs and concluded his presentation by providing examples of tools that BHW has developed to support clinicians in pursuing careers in underserved communities.

Discussion of presentation

Dr. Padilla opened the floor for questions.

Dr. Gould asked for additional information on BHW programs and Dr. Padilla confirmed that the growing number of supported programs resulted from Congress' priorities during budget requests. He also confirmed that any external data shared from BHW would be aggregated and not allow individual identification.

Dr. Morley asked if grantees could be required to train students to work in rural and underserved urban areas for a minimum amount of time and Dr. Padilla confirmed that HRSA is taking this approach and deliberating how to leverage partnerships or adjust the training model to meet the specific needs of rural communities. When Dr. Morley proposed telehealth, Dr. Padilla confirmed that HRSA is discussing how to leverage technology for training, vie telehealth, distance learning, and tele-mentoring. When Dr. Fahrenwald provided examples of current efforts to potentially expand accreditation standards to support telehealth in rural and

underserved areas, Dr. Gould and Dr. Padilla continued discussions on potential ways to encourage primary care service in rural areas.

When Dr. Killinger asked his opinion, Dr. Padilla expressed he would most like HRSA to be remembered for their core mission of meeting the needs of vulnerable and underserved communities. Dr. Killinger also asked how chiropractors might participate in BHW programs and Dr. Padilla responded that Congress determined eligibility.

Dr. Morley suggested that HRSA educate government agencies, academic institutions, and professional societies about the need for primary care and the Committee discussed with Dr. Padilla what that might entail. Dr. Khatri proposed training primary care as a set of functions (i.e. continuity, coordination, contact, and comprehensiveness), while Dr. Golden suggested changing cultural norms towards defining allied health professionals and physicians as a team. Dr. Gould and Dr. Morley provided examples on competent team-based care, while Dr. Erwin and Dr. Kennedy focused on how training might be interprofessional and person-, family-, and community-centered.

Ms. Wynn thanked Dr. Padilla for his support for Area Health Education Centers across the country and he thanked her for her contributions in redesigning the program towards collaboration and stakeholder engagement.

When Dr. Padilla elaborated on the training, education, and service programs BHW offers, Dr. Gould emphasized that results must be shared with academic institutions and inform improvements in education. Finally, Dr. Morley expressed gratitude for HRSA staff and Dr. Padilla thanked the Council for their work.

Discussion: 18th Report Recommendations and Development

Dr. Kennedy stated the working title of the 18th Report was "Promoting the inclusion of population health at the nexus of primary health care delivery and public health." The Committee agreed on the theme of the report and discussed other potential titles; additional suggestions were to be sent through e-mail.

Dr. Kennedy presented a list of areas to start discussions and the Committee reviewed ACICBL's 12th and 13th reports to identify relevant recommendations that could be improved upon and avoid redundancy in their current recommendations. Drs. Kennedy, Gould, Killinger, Masaki, and Khatri volunteered to be on the writing committee for this 18th report. After extensive discussion, the Committee voted and unanimously agreed upon five recommendations for their 18th Report, namely:

(1) Training the clinical population and providers on the impact of population and public health data,
(2) Analyzing population health data to identify root causes,
(3) Developing and implementing evidence-based interventions,
(4) Evaluating and translating the effectiveness of interventions, and
(5) Disseminating position health outcomes to rural and underserved populations.

Discussion: Upcoming meeting presentations

Dr. Weiss confirmed the next meeting will occur in August with presentations from Dr. Tierney from the Southcentral Foundation of Alaska. Dr. Weiss would contact Dr. Ellen-Marie Whelan, CMS Chief Population Health Officer to invite her to present to the Committee. The Committee discussed having a presentation on accreditation bodies by representatives from the Health Professions Accreditors Collaborative, Accreditation Council for Graduate Medical Education. Dr. Weiss explained that HRSA budgeted for 5 non-federal speakers for FY 2019 and that cap could not be exceeded.

When the Committee suggested the 18th report be organized in order of the recommendations, Dr. Weiss informed them that the technical writer would draft the report and confer with the writing committee via teleconference as necessary.

Public Comment

Dr. Weiss opened the meeting for public comment and there was none. She adjourned the meeting at 2:00 p.m.

References

Kindig, D., & Stoddart, G. (2003). What is population health? *American Journal of Public Health*, *93*(3), 380-383.