HERO CMO/CHO PROCEEDINGS

Psychologically Healthy Organizations

The CMO/CHO's Role in Surveilling and Addressing Social Determinants of Mental and Emotional Health

February 11, 2019 | Westin Riverwalk, San Antonio, Texas

HERO

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WHY A SUMMIT ON SOCIAL DETERMINANTS SPECIFIC TO MENTAL HEALTH?

Paul Terry, PhD, Senior Fellow, HERO

Though psychological and emotional health issues are now receiving increasing attention regarding the impact of work and the workplace culture, there is sparse empirical evidence about the role of preventing mental health problems at the organizational level compared to detection and referral at the individual level. Even less is known about how social forces such as race, class, social isolation and stigma can be effectively addressed in the workplace to ameliorate conditions like depression, anxiety and other mental illnesses. Though it is clear that mentally toxic workplaces reduce productivity and increase accidents and injuries, it's less clear how to instill and sustain emotionally vibrant and psychologically thriving organizations.

We are pleased to offer these proceedings from this Chief Medical Officer (CMO)/Chief Health Officer (CHO) Summit which was designed to provide evidence-based updates on the etiology of psychologically healthy workplaces with an emphasis on addressing social determinants of health (SDoH). For most physicians, "soft skills" got short shrift in their medical training. What's more, for most of today's chief medical officers trained in occupational medicine, assessing and treating mental health issues was wedged into a clinical education curriculum loaded to the hilt with musculoskeletal injury prevention and diagnosis, chronic condition management and workforce epidemiology. The proceedings specifically focus on the chief medical officers' and the chief health officers' role in population level assessment and advocacy and leadership in creating psychologically healthy conditions at work. At this summit we asked how all employees, regardless of their socio-economic status and in spite of interpersonal differences, can thrive mentally and emotionally. Our key learning objectives and summit goals were to:

1. Examine current issues and trends. Why is psychological safety trending as a need? What key concepts, models, frameworks and ideas have proven influential in shaping strategies for getting upstream of mental and emotional well-being at work?
2. Explore measures that matter. What dashboard items have proven salient for building and sustaining resiliency, mental health equity and psychological safety? What are the most critical measures of success for psychologically healthy organizations?
3. Review exemplary cases. Who is leading in addressing socially determined gaps in mental health care? What are organizations doing to better fit the work with workers such that more move from surviving to thriving?
4. Examine "techquity." What technology-based solutions are proving promising in creating equitable access to mental and emotional well-being at work?
5. Discuss how to overcome barriers to leading in mental health. Why aren't more organizations embracing concepts of companionate love, gratitude, vulnerability and empathy? Are these soft skills sufficiently proven to be considered core technical competencies relating to improving performance and productivity?
6. Generate new ideas and new uses for old ideas. What's missing and what ideas, new or old, are essential to leaders intent on

building thriving organizations? Are maturing concepts about building a culture of health and meeting community needs replacing bio-psychosocial determinants of health? Should zip codes, in practice, be more influential than genetic codes?

As you will see in these proceedings from the HERO CMO/CHO Summit, we enlisted leading experts as conversation starters. We turned early and often to engaging all in attendance in disciplined reflection, expansive ideation and problem solving. We organized the sessions to be highly interactive in order to build a robust network of CMOs/CHOs and to deepen professional connections. Our shared inquiry approach ensured that all participants returned to their organizations energized and motivated to test new ideas and exert renewed leadership for advancing health and well-being for all. You will see that these proceedings offer a compendium of contributed papers, summaries of presentations and abridged notes from table top discussion groups. HERO offers our sincere gratitude to our expert contributors, to all in attendance and to Dr. Rajiv Kumar and Virgin Pulse for their generous sponsorship of this summit.

THE SOCIAL DETERMINANTS OF MENTAL HEALTH

By Michael Compton, MD, Professor of Clinical Psychiatry, Columbia University College of Physicians and Surgeons

(Abridged version of Dr. Compton's plenary presentation.)

The social determinants of health are prominently responsible for health disparities and inequities. *Health disparities* are differences in health status among distinct segments of the population including differences that occur by gender, race or ethnicity, education or income, disability or living in various geographic localities. *Health inequities* are disparities in health that are a result of systemic, avoidable and unjust social and economic policies and practices that create barriers to opportunity

How are social determinants related to health inequities?
Health begins were we live, learn, work and play. Your zip code may be more important to your overall health than your genetic code.

Social Justice: *"Assuring the protection of equal access to liberties, rights, and opportunities, as well as taking care of the least advantaged members of society." - John Rawls*

Mental health social determinants are not distinctly different from the social determinants of physical health. But mental health deserves special emphasis for these reasons: a) mental illnesses and substance use disorders are highly prevalent and highly disabling; b) behavioral health conditions are high-cost illnesses; c) behavioral health conditions likely have more powerful effects on mental health than on physical health conditions; and d) unlike most physical health conditions, mental illnesses are not only created in part by social determinants, but also **lead to** social determinants that worsen disease course and outcome. Figure 1 demonstrates a conceptual model for the linkages.

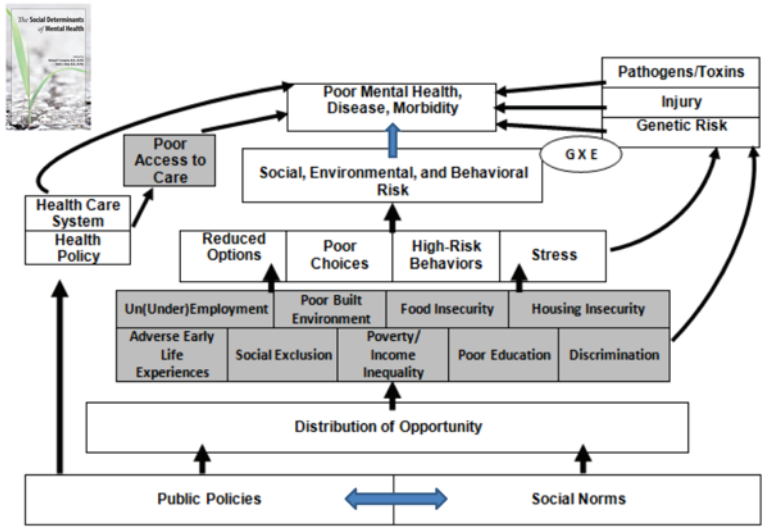

Figure 1. Conceptual Model

The Social Determinants of Health and Prevention
Addressing social determinants requires addressing health disparities and health inequities: primary, secondary, and tertiary prevention. This includes the *WHEN* (universal, selective and indicated preventive interventions); the *WHO* (addressing the social determinants of health through public policies and social norms); and the *HOW*. Addressing social determinants involves understanding the "causes of the causes," as the fundamental causes of disease need to be considered. If risk factors are the precursors of disease, then the environmental and contextual factors that precede or shape these risk factors are the causes of the causes.

How is an infection in the leg a social disease? The Causal Chain
Like a child's incessant use of "why?", we need to ask a lot of whys

to reveal the causal chain. Why is Jason in the hospital? *Because he has a bad infection in his leg.* Why does he have an infection? *He has a cut on his leg and it got infected.* Why does he have a cut on his leg? *He was playing in a junk yard next to his apartment building and fell on some sharp, jagged steel there.* Why was he playing in a junk yard? *His neighborhood is run down, and kids play there with no one to supervise them.* Why does he live in that neighborhood? *His parents can't afford a nicer place to live.* Why can't his parents afford a nicer place to live? *His dad is unemployed and his mom is sick.* Why is his dad unemployed? *Because he doesn't have much education and he can't find a job.* Why…?

Adverse Childhood Experiences (ACEs)

Adverse Childhood Experiences (ACEs) are defined as events that are inconsistent, threatening, hurtful, traumatic or neglectful social interchanges experienced by fetuses, infants, children or adolescents. ACEs research using a survey of more than 17,000 adults about childhood issues and current health status defines ACEs (occurring in the first 18 years of life) as: abuse (emotional, physical or sexual), neglect (emotional or physical) and household dysfunction (mother treated violently, household substance abuse, household mental illness, parental separation or divorce, or incarcerated household member). This research was used to create the ACEs Score. ACEs are highly prevalent (more than 60% of surveyed adults reported one or more ACEs) and are associated with many health problems such as suicide attempts.

Discrimination and Social Exclusion

Social exclusion results from racism, discrimination, stigmatization, hostility and unemployment. These processes are socially and psychologically damaging, materially costly and harmful to health. People who live in, or have left, institutions such as jails and prisons, children's homes and psychiatric hospitals are particularly vulnerable. Types of discrimination can include interpersonal (individual), institutional (organizational), structural (systemic), legal, illegal, overt (blatant), covert (subtle), *de jure* (mandated by law) or *de facto* (not sanctioned by law, but still the standard practice).

Racism affects health by three main factors: 1) it can lead to truncated socioeconomic mobility, differential access to desirable resources and poor living conditions that can adversely affect health; 2) experiences of discrimination can induce physiological and psychological reactions that can lead to adverse changes in health and mental health status; and 3) in race-conscious societies, the acceptance of negative cultural stereotypes can lead to unfavorable self-evaluations that have deleterious effects on psychological well-being. Self-reported racism associations occur in two main areas. The first is increased negative mental health outcomes, which can include depression, anxiety, psychological distress, negative affect and trauma PTSD. The second is decreased positive mental health outcomes, such as self-esteem, life satisfaction, control, mastery and overall well-being.

Food Insecurity

Food insecurity is a condition at the household level wherein the availability of nutritionally adequate and safe foods, or the ability to acquire such foods in socially acceptable ways, is limited or uncertain, oftentimes due to constrained economic resources. In 2007, 6.2 million U.S. households (15.8% of households with children) were food insecure at some time during the year. It has three main components: food availability (sufficient quantities of food available on a consistent basis); food access (sufficient resources to obtain appropriate foods for a nutritious diet); and food use (appropriate use based on knowledge of basic nutrition and care). Of the three factors, food access is the primary issue for Americans.

Food insecurity also affects mental health with clear linkages to depression. It is also related to generalized anxiety disorder and self-reported, poor mental health status. Food insecurity affects academic performance and social skills. It can cause behavioral problems, hyperactivity and inattention in children. It can even lead to increased suicidal ideation in adolescents.

The Food Insecurity-Obesity Paradox occurs when the two seemingly contradictory states of food insecurity and obesity coexist

in economically vulnerable populations. This effect is particularly observed in women and children. Possible explanations for the food insecurity and obesity association include a diet consisting of inexpensive but energy-dense foods. There is the related problem of food deserts, meaning there are very few places near poor communities where residents can buy real (i.e. plant based) foods.

Figure 2 depicts the multiple components linking food insecurity to mental health.

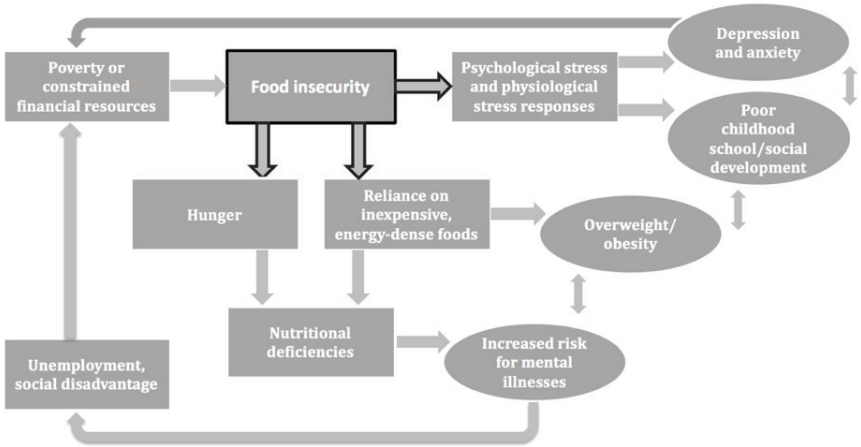

Figure 2. How does food insecurity, as an example of a social determinant, get under the skin and into the brain?

What sorts of "public policies" are mental health policies?

All of them. These can include policies for energy, housing, education, employment, food and farm, transportation, environment, minimum wage, income and taxation.

The social *determinants* of health are problems within, and created by, society that have major impacts on health and disease. They predate, predict and cause poor health in diverse domains, as well as increase risk for virtually all physical and mental illnesses. These are akin to "social causation." For example, food insecurity *leads to* inattention and behavioral problems in school; job insecurity *leads to* substance use disorders; some adverse features of the built environment *lead to* anxiety disorders. The social determinants of health also impact health outcomes. Among people with existing health conditions (including mental illnesses), these same factors can *worsen course and outcomes*. In that respect, they again serve as social "determinants" of health and illness. They can adversely impact treatment engagement, medication adherence and disease self-management.

Unlike physical illnesses, mental illnesses commonly lead to social sequelae / social drift. This involves a lowering of social class attainment caused by the illness: having a mental illness leads to food insecurity, job insecurity and underemployment/unemployment, poor housing quality and housing instability/homelessness. But how are these connected? Mental illnesses cause social sequelae (which then adversely impact course and outcomes), in part because of the nature of their symptoms, but in large part because of the way that society has structured itself with regard to people with mental illnesses (e.g., social exclusion, discrimination ("stigma"), entitlements that assist but also ensure poverty). See Figure 3.

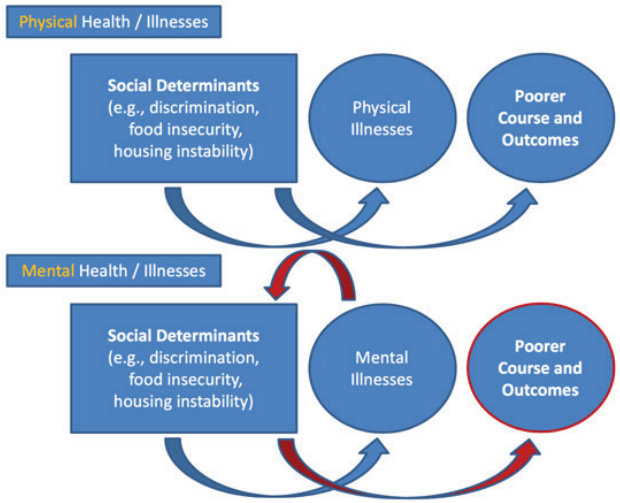

Figure 3.

How do the social determinants have a greater impact on mental health than physical health?

Mental illnesses lead to social problems (e.g., discrimination or stigma), victimization (and structural violence), unemployment, impoverishment, poor housing quality (homelessness) *to a much greater extent than* do physical illnesses. In part because of symptomatology, but largely because we have collectively decided (through social norms and public policies) that it should be that way.

How is addressing the social determinants a form of prevention?

- Discrimination and Social Exclusion
  No one is born hating another person because of the color of his skin, or his background, or his religion. People must learn to hate, and if they can learn to hate, they can be taught to love, for love comes more naturally to the human heart than its opposite. ***Nelson Mandela***

- ACEs = Adverse Childhood Experiences

- Poor Education and Educational Inequality
  The school is the last expenditure upon which America should be willing to economize. ***Franklin D. Roosevelt***

- Unemployment, Underemployment and Job Insecurity
  If a man doesn't have a job or an income, he has neither life nor liberty nor the possibility for the pursuit of happiness. He merely exists. ***Martin Luther King, Jr.***

- Poverty, Income Inequality and Neighborhood Deprivation
  Poverty is the worst form of violence. ***Mahatma Gandhi***

- Food Insecurity
  There will never cease to be ferment in the world unless people are sure of their food. ***Pearl Buck***

- Poor Housing Quality and Housing Instability
  The connection between health and the dwelling of the population is one of the most important that exists. ***Florence Nightingale***

- Adverse Features of the Built Environment
  Where you stand depends on where you sit. ***Nelson Mandela***

- Poor Access to Health Care
  Of all the forms of inequality, injustice in health care is the most shocking and inhumane. ***Martin Luther King, Jr.***

The prior list of nine social determinants of mental health is not exhaustive. Others include features of the workplace environment; access to transportation; environmental pollution (air, water, soil, noise); exposure to conflict, violence, war, immigration, and refuge/asylum among children and adults; criminal justice involvement and climate change.

Presentation summary:

- There are societal, environmental and economic conditions that impact and affect mental health outcomes across various populations.
- These conditions are shaped by the distribution of money, power and resources at global, national and local levels, which are themselves influenced by policy choices.
- The social determinants of health are prominently responsible for health disparities and inequities seen within and among populations.
- An important report is from the World Health Organization Commission on the Social Determinants of Health: *Closing the gap in a generation: Health equity through action on the social determinants of health* (2008).

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THE ROLE OF THE CHIEF MEDICAL OFFICER / CHIEF HEALTH OFFICER IN ADDRESSING THE SOCIAL DETERMINANTS OF MENTAL AND EMOTIONAL HEALTH

Eduardo Sanchez, MD, MPH, Chief Medical Officer for Prevention & Chief of the Center for Health Metrics and Evaluation, American Heart Association; and Chris Calitz, MPP, Director of the Center for Workplace Health, American Heart Association

The American Heart Association was founded in 1924 by six cardiologists, and today it is the oldest and largest charitable organization dedicated to fighting heart disease and stroke. The Association employs approximately 4,000 people and has a grassroots network of 25 million volunteers and supporters in more than 150 local offices nationwide. In 2010, the organization set a goal to reduce mortality from heart disease and stroke by 20%, and to improve the heart health of all Americans by 20% by 2020. To measure progress to the goal of improved heart health, researchers created a scientifically validated construct to measure ideal cardiovascular health called **Life's Simple 7**: not smoking, eating healthily, being physically active, maintaining a healthy weight, and managing blood pressure, controlling blood cholesterol and reducing blood glucose. Since then, several peer-reviewed studies have shown that optimal heart health (five or more ideal metrics) is associated with a lower risk for a range of disabling and costly disease conditions, including heart disease and stroke, but also depression, cognitive function and incident dementia.

The Association's journey to mental health has been catalyzed by the association's **CEO Roundtable**, a leadership collective of more than 40 CEOs from the nation's largest companies who are collaborating with the Association to create healthy companies and communities. Collectively, these companies provide healthcare benefits to over 10 million employees and their dependents. The CEOs collectively pledged to adopt several guiding principles, which included promoting **Life's Simple 7** as an evidence-based, common standard to measure heart health in the workplace. The Roundtable commissioned a report from the Center for Workplace Health—**Resilience in the Workplace (2017)**—due to concerns about high levels of poorly managed stress and low resilience in the American workforce.

The report reviewed the evidence on the effectiveness of resilience training programs delivered to workplaces and outlined a roadmap for employers to create a culture that supports resilience by designing, implementing and evaluating evidence-based programs. At the annual meeting in 2018, increasing levels of poor mental health was a top priority, especially in light of the fact that almost 50% of U.S. adults experience a mental health disorder at some point in their life and one in five U.S. adults experience a mental health disorder each year. This, coupled with reports of significant increases in opioid deaths and substance misuse disorders among U.S. adolescents and adults, led the Roundtable to commission a new report, **Mental Health - A Workforce Crisis**, which published this year. The report synthesized research, presented Roundtable mental health case studies, included national survey data on employee perceptions of their own mental health and made recommendations on actionable strategies employers can implement to create a mental-health friendly workplace. The employee survey indicated that almost 9 in 10 employees say that employers have a responsibility to support their mental health.

In parallel to this work, the Association published a scientific statement in 2015 on **Social Determinants of Risk and Outcomes of Cardiovascular Disease**, which defined social determinants of health comprising several factors such as socioeconomic position, race/ethnicity, social support, access to care, culture and language and residential environment. Since then, the Association has had a laser focus and an ambitious strategy to proactively address the social determinants of heart health across all its activities, including research, quality of care and policy and advocacy.

The workplace is an ideal setting to engage the roughly 157 million U.S. employed adults in mental health and well-being. And employers

are in a unique position to address mental health because employees spend almost 8 hours a day at work, second only to sleeping. We also know that the risk factors for poor mental health and low quality of life are not evenly distributed among employees. Not having enough food to eat, living in unaffordable or unstable housing disproportionately effects "minority" populations. Risk factors for many common mental health disorders are associated with social inequalities, whereby the greater the inequality the higher the inequality of risk. Populations are made vulnerable by deep-rooted poverty, social inequality and discrimination. In order to reduce these inequalities and reduce the incidence of mental disorders overall, it is vital that action is taken to improve the conditions of everyday life, beginning before birth and progressing into early childhood, older childhood, adolescence, during family building and working ages and through to older age.

Practically speaking, as health leaders in companies and communities, chief medical officers and chief health officers can raise awareness of the impact of social determinants of mental health—economic stability, access to healthcare, education, neighborhood characteristics such as racial segregation and poverty and other societal influences—that effect employees, their families and communities. Inside the four walls of the workplace, CMOs and CHOs can advocate that evidence-based policies, programs and environmental supports are implemented that have the potential to increase resources and support systems for optimal mental health. Examples that the private sector and business can take to improve mental health at work include and are not limited to:

- **Policy interventions –** sponsor stigma reduction and anti-discrimination initiatives.
- **Early screening –** connect employees to primary care.
- **Programs and benefits –** offer a comprehensive package of medical benefits and prevention programs that put employees at the center of care and support.
- **Employee engagement –** consider the unique needs of diverse employee populations and involve them in all aspects of workplace decision-making.
- **Community partnerships –** collaborate with local community-based mental health organizations to make resources available to employees.
- **Reporting outcomes –**use data to evaluate and report outcomes.

Outside the workplace, and in communities, business leaders can use their voice and influence to support evidence-based policies that improve the underlying causes of unhealthy environments and promote health equity. While there is clearly a role for government and public health to play in addressing the social determinants of health and mental health, the private sector and businesses can support these efforts through a shared responsibility approach through multi-sectoral partnerships.

MENTAL HEALTH IN THE WORKPLACE AND THE VITAL ROLE OF LEADERSHIP

Chris Calitz, MPP, Director of the Center for Workplace Health, American Heart Association

(Abridged version of Calitz's plenary presentation.)

The Mission of American Heart Association is to be "a relentless force for a world of longer, healthier lives." This is all done to promote the ideal of heart health which is a long, healthy life. Men and women in ideal heart health at age 50 have significantly lower risk of developing heart diseases.

Why does the Association have an interest in psychologically healthy organizations? The answer is that the workplace is an ideal setting to engage adults in mental health and well-being. Psychologically healthy workplaces provide training and safeguards that address workplace safety and security issues. Employers also improve mental health by offering adequate health insurance, including mental health coverage; health screenings; access to health/fitness/recreation facilities; and resources to help employees address life problems, for example, grief counseling, alcohol abuse programs, Employee Assistance Programs (EAPs) and referrals for mental health services. Related to this, the Substance Abuse and Mental Health Services Administration (SAMHSA) is also interested in healthy workplaces, facilitated through the Division of Workplace Programs. This agency provides oversight for the Federal Drug-free Workplace Program and oversees HHS-certified laboratories that perform drug testing for federal agencies and federally regulated industries. In 2016, it hosted "Mental Health in the Workplace: A Public Health Summit," convening stakeholders from academia, industry and government to examine barriers to research on workplace mental health, implementation of workplace interventions and services, best practices for overcoming barriers to research and interventions and focus on solutions to improve the workplace environment, work productivity and cost efficiency.

How did the American Health Association get to mental health? The Association created the **CEO Roundtable Report**, *Mental Health: A Workforce Crisis (2018-2019)*.

There are some interesting facts from the **CEO Roundtable Harris Poll**, *The Voice of the Employee in Mental Heal th*. Consider these key findings:

- 76% have struggled with at least one issue that affected their mental health.
- 42% have been diagnosed with a mental health disorder.
- 63% of employees diagnosed with a disorder have not disclosed it to their supervisor.
- 90% say employers have a responsibility to support their mental health.
- 40% want supervisors to be trained to identify emotional distress among employees.

We also have a focus on the social determinants of health and social determinants of mental health. The *County Health Rankings Model (2000)* shows the relationship between social determinants and mortality. The social determinants of risk and CVD outcomes include many factors: socioeconomic position, race and ethnicity, social support, culture and language, access to care and residential environment. The future directions for this area will involve conducting studies that examine the interactions between social factors in relation to cardiovascular health and incorporating nontraditional measures such as wealth/privilege and institutionalized racism.

Specific to the social determinants of mental health, some key insights include the following:

- Good mental health is integral to human health and well-being.

- Risk factors for many common mental disorders are associated with social inequalities, whereby the greater the inequality the higher the inequality in risk.
- In order to reduce these inequalities and reduce the incidence of mental disorders overall, it is vital that action is taken to improve the conditions of everyday life, beginning before birth and progressing into early childhood, older childhood, adolescence, during family building and working ages and through to older age.
- Populations are made vulnerable by deep-rooted poverty, social inequality and discrimination.
- Action throughout these life stages would provide opportunities for both improving population mental health and for reducing risk of those mental disorders that are associated with social inequalities.
- As mental disorders affect physical health, these actions would also reduce inequalities in physical health and improve health overall.
- Taking a life-course perspective recognizes that the influences that operate at each stage of life can affect mental health.

Properly addressing and improving the social determinants of health is the shared responsibility of the government / public health and the private sector / business communities. The key areas of action for each community are shown below.

Government / Public Health
Policy – enforcing mental health parity, appropriations
Surveillance – adequately fund CDC and other agencies to collect relevant data
Evidence – synthesis to inform policies and clinical guideline (e.g., ARHQ)
Data-driven decision making – e.g., SAMHSA
Research – federal funding focused on social factors of chronic disease

Private Sector / Businesses
Policy – sponsoring stigma reduction initiatives and reducing barriers to access; advocacy
Screening – health assessments to connect employees to primary care
Evidence – implementing evidence-informed interventions
Data-driven decision-making – investing in manager training and evaluating outcomes
Research – support or conduct research to address knowledge gaps and accelerate translation

Finally, the role of leadership is key to creating the best practices that are most likely to be applicable to mental health and social determinants of health. Three areas are most relevant. The first is positioning health (with mental health explicitly identified) and well-being as a strategic organizational goal. This can be supported via a dedicated health, safety and well-being budget (apart from health insurance and incentives) and with a written, strategic health promotion plan with specific, measurable goals. Second is leadership who actively model healthy behaviors. This occurs when all managers participate in well-being activities, leaders send health communications to employees, and worksites support health performance objectives and recognize teams. And thirdly, the implementation is supported. The organization has a paid health promotion coordinator, the middle managers or supervisors are made aware of the well-being plan and are made accountable for the plan objectives, the implementation plan is shared with all employees, and the company recognizes and rewards people/ teams for meeting goals.

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WHAT'S UPSTREAM OF MENTAL HEALTH ISSUES AT WORK?

Robert Carr, MD, CMO, Jool Health; President, American College of Preventive Medicine

(Abridged points from Dr. Carr's panel presentation.)

What Affects Health? One of the areas we do not look at often is the role of the employer in promoting mental health and well-being. We do not have a mental health preventive exam like we do for medical illnesses. We focus a lot on mental illness treatment, but socioeconomics is key. There is a relationship between social determinants of health and mortality. These include factors such as: low education level, racial segregation, low social support, individual poverty, income inequality and area level poverty.

Social Determinants of Risk and Cardiovascular Outcomes. The statement from the American Heart Association emphasizes the social determinants of health. Our future directions include conducting studies that examine the interactions between social factors in relation to cardiovascular health and also incorporate nontraditional measures such as wealth/privilege and institutionalized racism.

Social Determinants of Mental Health - *Key Points*

- Mental health and many common mental disorders are shaped by the social, economic, and physical environments in which people live.
- Social inequalities are associated with increased risk of many common mental disorders.
- A health equity approach needs to be grounded in proportionate universalism. That is, action needs to be universal and taken across the whole of society, yet be calibrated proportionately to the level of disadvantage to equalize the social gradient in health outcomes.
- A SDoH approach requires that action be taken throughout the life course, at the community level and at the country level including environmental, structural and local interventions.
- There is compelling science that giving every child the best possible start will generate the greatest societal and mental health benefits.
- Social arrangements and institutions, such as education, social care and work have a huge impact on the opportunities that empower people to choose their own course in life. Experience of these social arrangements and institutions differs enormously and their structures and impacts are, to a greater or lesser extent, influenced or mitigated by national and transnational policies.

Work is a significant driver of mental and emotional well-being, including the organizational structure itself; the role of work in providing purpose and meaning; and stress, insecurity and pressure. The social connections at work have a relationship to mental health. The role of the purpose of work could be aligned with meaning fulfillment and connection to mental well-being. We need to focus more upstream to identify life determinants that make people more at risk. How can we use data to prevent mental health issues? Leaders have a critical role to play in creating cultures that promote mental health and well-being rather than diminish such.

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WORK, MEANING AND SOCIAL CONNECTEDNESS

Michael Compton, MD, Professor of Clinical Psychiatry, Columbia University College of Physicians and Surgeons

(Abridged notes from Dr. Compton's panel presentation.)

My role is to frame and define social determinants of mental health as a psychiatrist. The social determinants of mental health (SDoMH) are societal factors and so they have an impact at the societal level. We see impacts at the neighborhood level and how the conditions of homes can have an impact on the health of the entire community. The SDoMH change the epidemiology, incidence, prevalence and demographic characteristics of mental health at the community level (not just those adjacent to a bad neighborhood). The problem is that employers tend to focus on access and treatment for mental ill-health. The solution is to focus more upstream and outside the health system – which are the social determinants of health (SDoH).

Just seeing homes in disrepair stirs up emotions like loneliness, despair and insecurity. They work at the individual level to influence risk and outcomes associated with mental illness as well as at the community level.

Social determinants are important as they affect everyone. Work, meaning and social connectedness are key components. It is healthy to have high quality connections. The research evidence is substantial, with examples for social connectedness affecting individual functioning; cardiovascular, neuroendocrine and immune systems. Social connectedness affects how individuals adapt to career and job transitions, adapt when needing task related help, enhance and enrich identities, form attachments to work organizations or to communities and their moments of learning and inquiry. Social connections enable individuals to develop, grow and form attachments to their organization; foster psychological safety and trust and greater unit-level learning from failures; spawn spirals of increasing cooperation and trustworthiness across the organizations; improve organizational processes such as coordination and error detection; and aid individual employees in recovery and adaptation when suffering from loss or illness.

Photo Credit: Michael T. Compton

What are our greatest opportunities? These relate to creating a situation or condition favorable for attainment of a goal; a good position, chance, or prospect, as for advancement or success; a situation in which it is possible to do something desirable; or a time or set of circumstances that makes it possible to do something. But the conditions or circumstances favorable for achieving goals, health and happiness are not the same for everyone. Not everyone has the same opportunities in life. The distribution of opportunity is one of the constructs that underpins the SDoH. Job insecurity, housing instability, education inequality and food insecurity are variants of the SDoH.
Public policies – formalized, codified, written rules, rulings, regulations, legislation – all are at the foundation of SDoH and so are social norms. They are not legislated but attitudes and opinions about how we perceive our world (i.e. current opinions of some that are discriminatory). Social norms are also part of the context (e.g., racist lies from President Trump about Mexicans). Just seeing them contributes to a sense of loss, sadness or insecurity. Health and disease are driven by SDoH, which are influenced by distribution of opportunity, which is driven by public policies and social norms (which are inter-related).

CREATING EQUITY IN PSYCHOLOGICAL SAFETY: WHERE ARE WE AT IN THIS JOURNEY?

Dexter Shurney, MD, CMO, Zipongo, President of the American College of Lifestyle Medicine

(Abridged notes from Dr. Shurney's panel presentation.)

Psychological safety is a shared belief that the team is safe for interpersonal risk taking. It can be defined as "being able to show and employ one's self without fear of negative consequences of self-image, status or career." (Kahn 1990, p. 708) In psychologically safe teams, team members feel accepted and respected. Where are we in this journey? We can start with corporate values (value statement, strategy/tactics and leadership goals/incentives). We also can examine human resources (surveys, psychological safety surveys, training and metrics, measure progress). Third, we can ask the chief medical officer to weigh in. For example, as the CMO at my organization, I care because it impacts the health of my employees as an important social determinant of health model. Social determinants can elicit either positive or negative stress responses, and chronic stress leads to a multitude of health and productivity issues. Long-term activation of the stress-response system, where overexposure to cortisol is a key issue, can affect many key body systems and functions including: glucose metabolism, immune system, digestive, sleep and mood (anxiety/depression), and creativity and thought processes (memory/concentration).

- "Prolonged elevation [and] circulation of the stress hormones in our bodies can be very toxic and compromise our body's ability to regulate key biological systems like our cardiovascular system, our inflammatory system, our neuroendocrine system… and leaves us susceptible to a bunch of poor health outcomes." A number of small studies have documented similar stress reactions in response to racism, and even in response to the mere expectation of a racist encounter. **Amani Nuru-Jeter, UC Berkeley**

There are overlaps between stigma around mental health and issues of racism. There are overlaps, and we ought to call mental health stigma what it is, and that's discrimination. Shame can be an inhibitor to accessing needed services. In the medical DSM code, there is only one entry that is associated with a sense of shame and that's major depressive disorder. One of the symptoms is deep feelings of shame. Shame is created by society and comes from outside of us.

- "Individually these incidents seem benign, but cumulatively they act like sort of low-grade micro-traumas that can end up hurting you and your biology. It's not just having your feelings hurt. It's having your biology hurt as well." **Roberto Montenegro, Seattle Children's Hospital**

All lifestyle issues play a role in a healthy organism. If you don't get enough sleep, you lose your ability to read people's facial expressions. Diet can impact your mood. The role of lifestyle plays a big role in increasing resiliency to survive in whatever environment you are in, and lifestyle can also help you address challenges. Health disparities are real, as there is more research than gaps in health care and health disparities, but when you control for lifestyle, many of the disparities go away. Being able to find healthy foods and practice healthy lifestyles has more to do with health than simply providing more access to health care. We need to focus on improving access to healthy lifestyle and not just access to health care.

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EXXONMOBIL'S CULTURE OF HEALTH: JOURNEY TOWARD A MORE RESILIENT ORGANIZATION

Deena Buford, MD, MPH, Global Medical Director, ExxonMobil

(Abridged notes from Dr. Buford's panel presentation.)

This presentation provides an overview of the corporation, the ExxonMobil Medicine and Occupational Health support model, and drivers for the resiliency program and offers three examples of country specific resiliency programs. ExxonMobil is in six continents and nearly every country of the world. They employ about 70,000 employees and contractors. The company structure has four main components: 1) upstream: exploration, development, production, power and gas marketing, research and XTO energy; 2) downstream: fuels and lubricants, research and engineering; 3) chemical: manufacturing, marketing and research; and 4) corporate: safety, security, health and environment, human resources, public and government affairs, and law.

"Our efforts to protect the safety and health of our employees, contractors & communities are at the heart of what we do every day." **Darren Woods, Chairman and CEO**

Broad Geographic and Population Health Support. Our goal is to provide employees and contractors with 24/7 assistance wherever health support is needed. To meet this objective, we have 90 clinics across 30 countries. We have occupational health centers located with hazardous operations (e.g., offshore platforms), where regulations or other agreements require, and also where requested by the business. These centers provide support to ExxonMobil business travelers, expats and eligible dependents, contractors at selected locations and geophysical expeditions. These corporate medical centers conduct medical exams, fitness for duty testing and so on. Each line of business and part of the organization has their own unique support. Health programs must be customized to different exposures and hazards. We also inform health policy at the company, and we are currently designing cohort mortality studies to examine long term mortality of certain employee groups.

Medicine and Occupational Health Mission. We strive to provide for the health, safety and productivity of the ExxonMobil global workforce through our leadership in the efficient application of science, technology and risk-based occupational health practices. The six core areas of medicine and occupational health include clinical, industrial hygiene, substance abuse testing and control unit, technical operations and support, infectious disease control and culture of health. See Figure 4 below.

Figure 4: ExxonMobil Medicine & Occupational Health Mission

ExxonMobil Culture of Health. We consider health a state of complete physical, mental and social well-being, therefore both mental and physical health concerns must be addressed to achieve

well-being. The goals are to reduce chronic risks; contain medical expenses; positively impact safety; sustain ExxonMobil as an employer of choice; and increase employee productivity, employee work engagement and resilience.

Global Burden of Mental Illness. Why do we emphasize a culture of health? The reason is because of the significant burden of mental illness on our community and company. Globally, around 450 million people suffer from mental health conditions, placing these disorders among the leading causes of ill-health and disability worldwide. Depression and anxiety disorders cost the global economy US$1 trillion each year in lost productivity. For every USD $1 put into scaled up treatment for common mental disorders, there is a return of USD $4 in improved health and productivity. Nearly two-thirds of people with a known mental disorder never seek help from a health professional. An estimated 50% of all Americans will be diagnosed with a mental illness or disorder at some point in their lifetime.

"Mental illness is not a personal failure. In fact, if there is failure, it is to be found in the way we have responded to people with mental and brain disorders."
Dr. Gro Harlem Brundtland, Director-General of WHO

ExxonMobil Resiliency Launch. A major effort currently within the culture of health model has been the global launch of a program to boost the resiliency of workers. This involves increasing the awareness of employees, supervisors and their families about mental health, particularly in the areas of the sources of stress, the potential impact of stress on themselves and others, and learning about the availability and how to access the internal resources (such as the EAP) and external support services. See Figure 5.

EXAMPLE 1: Resiliency Program Nordic & Germany Engagement Survey. The objective was to establish a method to measure organizational resiliency, include the leadership perspective and enable the teams to build up resiliency by finding their own solutions. Our mission was to establish medicine and occupational

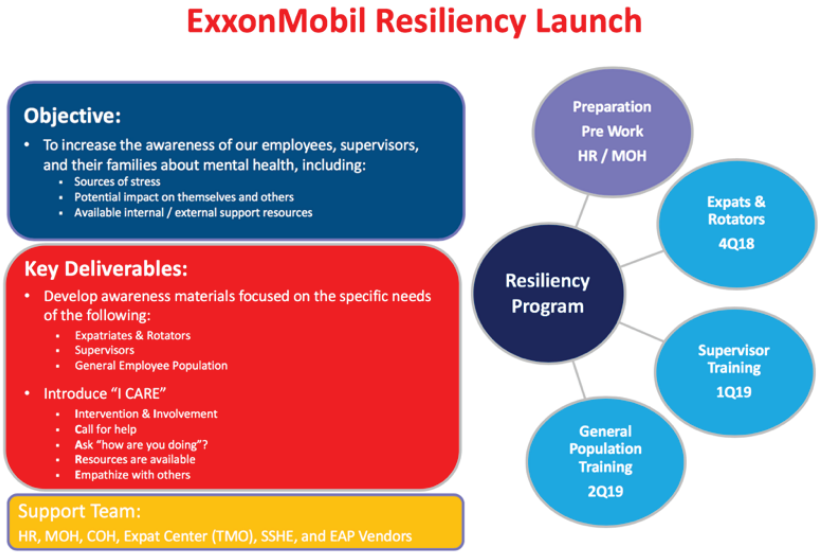

Figure 5: ExxonMobil Resiliency Launch

health clinical expertise in the field of resiliency to enable adequate support to our customer by 1) implementing a journal club for clinicians, and 2) collecting data on experience and needs of the clinicians (i.e., the survey) and establish a knowledge library. The project had support from the leadership team and fits in with the European Union Directive 89/391 EWG. The results and learnings are shared with the leadership team with a focus on leadership behaviors and feedback from the working groups. To introduce the communication on resiliency, we focused on awareness sessions on mindfulness, communication, Tai Chi, yoga and other well-being topics. We also did a survey to measure employee engagement using the Nordic Scandic Survey and adapted it to cultural needs.

EXAMPLE 2: Resiliency Program Work Model for the Business Enterprise. This global initiative started with planning and support and featured a questionnaire that gathered feedback at the enterprise level, at the department level and at management team levels. There was reporting on action plans and on status of measures. We concluded with an evaluation of the initiative. One example is our support of the *Norwegian Working Environment Act* and the requirements regarding the working environment in

general. This included understanding that the factors in the working environment that may influence the employees' physical and mental health and welfare are judged separately and collectively. The standard of safety, health and working environment will be continuously developed and improved in accordance with developments in society.

EXAMPLE 3: Canadian Hibernia Workforce Mental Health Awareness Initiative. We are supporting SSHE initiatives led by the workforce. Two main initiatives involve Mental Health First Aid Training and also Mental Health Awareness SSHE Moments. We created presentations and videos on mental health awareness for use in team safety meetings. Examples can be found on ExxonMobil Search Engine or visit **www.letstalk.bell.ca**.

Culture of Health at ExxonMobil. Our well-being programs have multiple benefits for workers and companies. We need to build on existing organizational and operational mechanisms and anticipate the need for internal and external business partnerships. We have learned that "one size will not fit all" for global or country well-being initiatives. We also recognize that time is needed for cultural changes and demonstrated health outcomes when working in a global corporate context. But we are fortunate to have senior executive engagement and many who are leading by example, and this is a key to success.

HOW FEAR IS CREATED IN ORGANIZATIONS: THE LEADER'S ROLE.

Kurt Olson, PhD, System VP and Talent Management and Organizational Effectiveness, OhioHealth

(An abridged version of Dr. Olson's presentation that set up group work exercises.)

Our brains are constantly scanning for fear. When we see it, our amygdala kicks in and elicits behavioral and physiological responses. At OhioHealth we do a minute of deep breathing before every meeting in my organization. We help leaders to become aware of what happens when the amygdala is triggered and the importance of calming it.

Let's explore this in your organization as a "teach the class" exercise. In your organization, pick the most feared person, meeting or committee. Use your first-hand fear experience. First, create your personal recipe to teach the beliefs, assumptions, stories and blames that would be required to replicate the same level of fear in our organization. Next, title your class. Finally, share your "Teach the Class" with someone at your table.

To begin applying these concepts in your organizations, ask your team what meetings, people or situations they fear and avoid. Do they experience things they don't talk about, can't talk about or don't feel comfortable talking about? Where are mistakes met with some sort of punishment or unwanted consequence, such as fear of losing their job, status or reputation? Where do your colleagues feel they need to over-prepare or have the meeting before the meeting? When do they have feelings of being micromanaged? What can you do to take your own responsibility? Look in the mirror and own it and ask, "how have I helped to co-create this fear?" Finally, also let your team take their "radical responsibility."

GROUP TABLE TOP DISCUSSIONS: CURRENT ISSUES IN ADDRESSING SDOH AT WORK

Questions the Groups Discussed During the Summit

1. Affordable housing, living wages, job strain and re-organization, work-fit, healthy literacy, continuing education and training, etc. What is the CMO/CHO's role in surveilling and addressing these social determinants of health issues? What measures matter most?
2. Speaking for your organization, what has been effective in assessing and supporting employees in greatest need/lower SES/ low health literacy/limited English proficiency?
3. Mental health services are underutilized by employees due to stigma about speaking about mental health issues to supervisors. Speaking out about work problems bears similar stigma in organizations. What's at the root of this and what resources are available to address?
4. Private lives/worksite policies. Where should we draw the line between data collection for surveillance and intervention planning versus data privacy needs and concerns about individual freedoms and choice?
5. What unique role does the CMO/CHO play in creating safe spaces and places? What principles guide your approach to creating space for respectful dissent?
6. What measures matter in tracking what is upstream of mental health issues? Are community health measures relevant for private sector leaders? What lessons have you learned about metrics that matter most in your organization?
7. What does it take for an initiative, such as addressing psychological safety, to have staying power in your organization? For our field?

Mental health services are underutilized by employees due to stigma about speaking about mental health issues to supervisors. Speaking out about work problems bears similar stigma in organizations. What's at the root of this and what resources are available to address?

- Three-legged stool: Employer needs to give themselves a hard look in the mirror. Leadership and the team need educating about what to look for. The associates themselves need to be more aware of what is going on with themselves and they can ask for help. Must have a culture of trust and dialogue. There must be alignment with purpose of the business.
- Is it the stigma that is keeping people from engaging? Or is it lack of the system to support addressing this? You can't just address stigma if you have no support for people once the issue is raised.
- The concept of stigma – discrimination and fear of discrimination. What causes this? Lack of education in general as well as fear of discrimination. General shame around mental and emotional health issues. In the corporate environment, one of the issues is also general distrust of the management team around all sorts of issues.
- Some companies restrict hours to less than 30 hours a week to avoid offering health benefits which creates mistrust.
- It's important to have an awareness of social factors of health. How aware are organizations, and do they accept them? It's the precondition to doing something about it.
- Difference between equal access and equity. Equity is about redistribution of resources and focusing on specific populations. Even though targeted communications to subpopulations is a best practice, many organizations are not doing this because it's hard. Technology can help with this.
- Organizational purpose can be very important to outcomes.
- How do we create a built environment that is conducive to mental health?

Private lives/worksite policies. Where should we draw the line between data collection for surveillance and intervention

planning versus data privacy needs and concerns about individual freedoms and choice?

- Recognition and education of employees and their families as well as managers and senior leaders. General corporate culture needs to be geared towards mental health and well-being. When we're with a client, need to talk about top down culture of health issues and their influence on mental health issues.
- On intervention side, there is a lack of access to quality mental health care. Provider networks are inadequate. People may raise their hand to say they need help and then cannot get the care they need. The mental health parity act has worked in reverse. Behavioral health professionals used to be paid more than PCPs but now they are paid the same and it lowers the bar.
- Onsite EAP professionals gain trust of employees and improve access. We've experienced good outcomes for employees using onsite EAP. We had an issue of a transgender individual reentering the workplace and working with EAP to identify how much they needed to share with their new work team.
- Technology is not always the best answer.

Fish Bowl: We invited several Summit participants to engage in an extemporaneous "fish bowl" exercise. They sat in a circle surrounded by the other Summit participants to offer a consultation and advice based on this scenario:

News is just now reaching this work force that a high-level leader committed suicide. You are four well respected CMO consultants who this company has engaged to provide recommendations to a very enlightened CEO and her executive team. Her leadership team is divided on this issue. Some want a tailored response and very targeted messaging and support where others favor a more generic approach to addressing the workforce.

Discussion

- We don't know what contributed to the suicide but it was a very high stress job. We believe the work situation contributed to this.
- Is this an isolated work group issue or do we feel this might be indicative of a larger issue?
- Let's bring in behavioral health professionals to interview some of this person's colleagues. There may be a lot of guilt for people who were aware of the issues. They may be at risk as well.
- Yes, there are often people feeling like they should have said something. They are dealing with guilt and we need to meet their needs for support
- Short-term immediate strategy is to help people through it. Immediate colleagues need to be engaged to gather data but also support.
- Also, examine other data sources that might be available to help us understand if this is limited to this workgroup versus a broader issue.
- We need to understand if there are pockets of people not using EAP services. Are our vendors doing surveys that might help us understand how EAP is perceived?
- Anxiety and depression reported on health assessments typically have high health care costs and other indicators.
- Medical claims for those in high stress jobs.
- We need to help leaders with communications to employees. They need to be as honest as they can while keeping private details private but also encouraging employees to take advantage of available resources.
- We have to ensure employees perceive there is a response of care and compassion by the leadership team and that it extends to all employees and not just to this individual.
- People may be self-medicating with drugs and alcohol. Can we identify data that helps identify others at risk?
- We know this was a high stress workplace. Are there factors that could be modified? How do we get at stressors?
- Contractors working in this workgroup may also have issues with the high stress environment, but their resources are different. So how can we ensure they are given access to what they need to deal with the same levels of stress? Contractors are often given the most stressful and hazardous jobs.
- Let's look at decisional control, nature of shifts, and other things that can be contributing.

- Quality safety circles – are there lapses in safety issues that have been identified? Can these circles also be used to monitor for other types of work conditions that contribute to psychologically unsafe environments?
- Suicides are unpredictable. Can we create a process to better handle future incidences? Can we help them be more proactive and not just reactive?
- Leaders need to take a different look at their policies and practices. It's not owned by anybody. Senior leaders need to own how our organization impacts health and well-being.
- Universal precautions model – what makes us think this population is different from any other group? There might be contributing factors but can we assume this is just the tip of the iceberg and there are many more below the surface? How can all employees be more resilient?

Summary

Top priorities: Leader communications, assessing to identify the big issues and addressing longer term needs.

When kids in schools commit suicides, there is a rapid response to ensure no copy cats. Can we get with executive leaders immediately to ensure there is communication in 24 to 36 hours to all employees to acknowledge what has happened and how the organization is seeking to address this for everyone?

We need to be mindful of how we view data. When we see certain indicators go up (e.g., Rx for mental health issues), is that necessarily a bad thing? It could mean people are getting the help they need.

EAP is very useful resource to deal with crisis response to situations like this. So CMOs are not alone in addressing this. EAP has expertise to support. EAPs are used 100% of the time when this type of thing happens, so this is an unfair ask of this group to deal with.

We need to get these issues into Harvard Business Review and other resources that will reach the business leaders.

It's not depression, anxiety and other disorders. We see lots of psychotropic drugs but no diagnosis. People are doctor shopping and recognition only identified with certain prescription drugs.

CLOSING THOUGHTS

Rajiv Kumar, MD, CMO and President, Virgin Pulse Institute; Robert Carr, MD, CMO, Jool Health and President, American College of Preventive Medicine; and Michael Compton, MD, Professor of Clinical Psychiatry, Columbia University College of Physicians and Surgeons offer observations about the state of SDoH in the Workplace.

Why are we talking about SDoH now? This is not a new concept. What has changed and where are we at this moment in time that this is at the forefront of our minds?

- American Heart Association published its 2015 scientific statement because researchers looked at the leveling out of gains in mortality and morbidity trends. What accounted for that? In some areas, we are diminishing what we have accomplished, particularly in some groups. There is a lot of data that we can look at more closely to understand the patterns we are seeing. According to the statement, it is the social factors of disease and their unequal distribution that account for the disparities in health outcomes. For women, for African Americans, people in rural areas.
- The 1990's psychiatry field held hope that genetics and new treatment technologies would allow us to make huge gains in treatment. We made some progress, but we didn't see the progress we expected. So, we are looking again at social contributors that need to be addressed. Our treatments are not great because taking Prozac and being homeless doesn't work.
- Data has afforded us insights we haven't had before. And we are coming to terms with social norms that are uncomfortable. Information on individual differences that contribute to different outcomes is also causing us to look at solutions in a new way.

What SDoH can you change moving forward? How much of our efforts should focus on children rather than adults? Where can we have better impact?

- The challenge is the widespread occurrence of violence in our society and the trauma it creates. We see this in children and in PTSD in veterans. ACE interventions in children have been effective.
- Physical violence, emotional violence is more widespread, and we are seeing societal level trauma today.
- All of us need to focus on children to the extent that we can. But we have to also address what is going on with our adults.
- Adults influence childhood outcomes, so we have to focus on adults too because you cannot positively influence the child without also improving the adult who cares for them.
- 1 in 5 employees reports being sexually harassed at work. So, a psychologically safe environment includes one where sexual harassment and bullying is enforced. We are now seeing an exodus of executive leaders because we are holding them accountable for enforcing policies that have been in place but not observed.
- OSHA does not require that employers measure and monitor unsafe environments for mental health. Breakdowns in trust, discrimination, bullying are not reported.

Inequitable distribution of opportunity is a weighty topic. What can I really do as an employer to address this? Where does an employer begin if they are not currently addressing this topic?

- It is important to focus on policies and social norms rather than individual social determinants.
- Focus on your own social norms and policies that are addressed in your own organization.
- You get the biggest bang for your buck when you use tools like policies to positively support the behaviors and outcomes you wish to see. We also need to do advocacy as much as we can. The evidence around tobacco and obesity show us that federal policies can have an impact.

HERO