# Impact of COVID-19 on Behavioral Health Issues for Boys and Men Economic Implications

An Expert Panel Report from Men's Health Network

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# Impact of COVID-19 Economic Issues on Behavioral Health of Males

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#### Disclaimer

The content of this monograph and any recorded representation of comments and opinions of the conference attendees does not necessarily represent the views of PCORI, Men's Health Network, or panel members' organizations, their directors, boards of governors, or any other organization officers or representatives.

# Forwards

# Forward by Men's Health Network

On behalf of Men's Health Network (MHN), we are proud to have partnered with the Patient-Centered Outcomes Research Institute (PCORI) to

convene this important Virtual E-Conference program on January 6, 2021, and to present this report based on the proceedings. This is the second in a series of three planned monographs. This monograph focuses on the economic impact COVID-19 related issues have had on the behavioral and psychosocial health of boys and men. Managing the behavioral health challenges faced by America's boys and men is a significant challenge. This already complex and multifaceted problem in care is

This unprecedented event in human history has touched every aspect of living including health care and sociologic interactions of all the world's citizens.

these discussions and expert opinions will not only help with regard to the immediate challenges in male behavioral health, but will also

> facilitate better planning and policy for inevitable future national and global health emergencies. This is very much a work in progress and the final chapters in assessing our response, the impact on behavioral health issues in our male population, and optimized ways to approach pandemics have yet to be written and assessed. We hope that the information and recommendations within this monograph help address these needs.

made even more challenging in the face of our national and global response and the economic downturn caused by the COVID-19 pandemic.

This unprecedented event in human history has touched every aspect of living, including health care and sociologic interactions of all the world's citizens. Our goal in organizing this program just to facilitate a vigorous discussion of the issues, and to identify important areas to pursue address the immediate global economic issues that drive the psychosocial needs of boys and men. We hope PCORI supports myriad projects and research programs that help patients and those who care for them make better informed health care choices, including choices in the area of behavioral health. Men's Health Network gratefully acknowledges PCORI for providing the resources and support.

Men's Health Network Staff

# **Forward By PCORI**

PCORI funds research that can help patients and those who care for them make better-informed decisions about the health care choices they face every day, with that research guided by those who need the information most. We also support projects that encourage the active integration of patients, caregivers, clinicians, and other health care stakeholders into all aspects of the patientcentered outcomes research (PCOR) process.

This conference by Men's Health Network—which brought together community leaders, policymakers, thought leaders, men's health activists, academic researchers, and clinicians, among others—aligns with PCORI's mission. Too often, in conducting research and in identifying research priorities, patients and other groups with valuable perspectives are left sitting on the sidelines. Conferences like this one, where everyone has a seat at the table, result in a more robust and complete discussion where everyone's voice is heard. The research agendas and, ultimately, the research that results from such conferences are generally more relevant to patients and more likely to be taken up in practice.

Because PCORI also strives to devote resources to reducing health care disparities, we hope the lessons learned from this conference will lead to continued dialogue and, ultimately, to PCOR that can help males and those who care for them make better-informed choices to manage their mental and behavioral health. PCORI commends all the conference's participants and hopes this report will foster continued engagement of all stakeholders in the health care community—not just clinicians—to discuss what can be done to give patients and those who care for them the tools they need to take charge of their health.

#### PCORI Staff

Too often, in conducting research and in identifying research priorities, patients and other groups with valuable perspectives are left sitting on the sidelines. Conferences like this one, where everyone has a seat at the table, result in a more robust and complete discussion where everyone's voice is heard.

# Forward by Project Principle

Since the initial planning of this program on the general issues of community interventions in behavioral health, our world has been dealing with the pandemic of our lifetimes: the novel

coronavirus (COVID-19). The COVID-19 pandemic produced another pandemic, one of anxiety, depression, isolation, uncertainty, and fear. These emotional and mental health issues have led to an increase in behavioral health problems, substance abuse, violence at home. and many other conditions which have exacerbated an already difficult situation for everyone-but especially boys and men.

Men's Health Network has convened three separate extension conferences (funded in part by PCORI) to examine the specific concerns involved in COVID-related mental health issues in men. When MHN's Board of Scientific Advisors and staff examined the impact of this pandemic, it became apparent that the introduction of the novel coronavirus in the last months of 2019 has now erupted into three interrelated pandemics: clinical impacts of the COVID-19 infection; the inadvertent economic and financial devastation caused by necessary virus mitigation strategies

The COVID-19 pandemic produced another pandemic, one of anxiety, depression, isolation, uncertainty, and fear. These emotional and mental health issues have led to an increase in behavioral health problems, substance abuse, violence at home, and many other conditions which have exacerbated an already difficult situation for everyone—but especially boys

and men.

(such as shelter-in-place orders and the mandatory closing of restaurants and many other "non-essential" businesses); and the disparate impact COVID-19 has had on vulnerable and minority communities. Each of these interrelated pandemics presents unique challenges in terms of management and mitigation efforts, and each has had a profound effect on the emotional (and physical) wellbeing of the hundreds of millions of people across the globe who have been affected.

MHN has been granted funding by PCORI to expand our inquiry and expert dialogue into the general topics of behavioral health in boys and men in America and to take an in-depth look

at each of these interrelated pandemics and examine how they have affected the emotional wellbeing of boys and men. This funding has also enabled MHN to (1) provide insight and expert opinion on the best approaches to resolving COVID-related issues, and (2) explore areas for future outcomes-oriented research that will not only address the current situation but will also help us be better prepared for the next time the global community will have to address a similar or worse—crisis.

This is the second in a series of three reports in this highly important area that focuses on the way that the economic downturns and shifts have already led to behavioral health and psychological harm to boys and men, and how they will continue to do so in the post-COVID world. It is the intent and hope of all involved that the information, recommendations, and key action we present here will help those involved in community leadership positions and family members to better understand what needs to be done, the best ways to do it, and how to disseminate important information about the results of their work. The proceedings of each of the three COVID-19 related behavioral health programs will be published and posted on the Men's Health Network website (www.menshealthnetwork.org) in the coming months and disseminated widely via social media, op-eds, articles, and expert media appearances.

Salvatore J. Giorgianni, Jr., PharmD Sr. Science Advisor, Men's Health Network Chair-Emeritus, American Public Health Association Caucus on Men's Health President, Griffon Consulting Group, Inc.

# **Executive Summary**

### Background

Established in 1992, Men's Health Network (MHN) is a national nonprofit organization whose mission is to provide health awareness and disease-prevention messages and tools, screening programs, educational materials, advocacy opportunities, and patient navigation to men, boys, and their families where they live, work, play, and pray. PCORI provides grants and other types of funding to support programs that help people make informed health care decisions and seeks to improve health care delivery and outcomes by producing and promoting high-integrity, evidence-based research guided by patients, caregivers, and the broader health care community.

### Program

The authors based this report on an expert panel convened by MHN on January 8, 2021 and partially funded by the Patient-Centered Outcomes Research Institute (PCORI) Engagement Award Initiative (EAIN00095). Out of concern for public health safety, this conference was held electronically. The professionally moderated panel brought together a broad cross-section of experts from private- and public entities involved in behavioral health issues, research, and care delivery, particularly as they pertain to males. The topic area was *"The Impact of COVID-19 on Behavioral Health of American Males"* The conference was structured to examine what is now known about the impact of COVID on clinical care, evolving areas of concern, and the best ways society can help boys and men deal with COVID-19-related mental-health issues.<sup>1</sup>

This discussion is unique, not only because of its focus on the vastly understudied concerns of boys and men, but also because it's being held in the midst of an unprecedented global medical crisis. As with any new and evolving medical situation, there are many hypotheses, some observations, some hard data, and perhaps too much speculation. Since the effects of COVID-19 on humans are, as yet, not fully understood,

<sup>&</sup>lt;sup>1</sup> Giorgianni, S.J., Brott, A. (2019). Behavioral Health Aspects of Depression and Anxiety in the American Male: An Expert Panel Report. *Men's Health Network*. Retrieved January 2020 from <u>https://www.pcori.org/sites/default/files/Mens-Health-Network-Conference-Summary.pdf</u>

there is no way to accurately predict the potential long-term pathophysiologic effects it may cause, how those effects will affect the future functioning of our society, or their impact on mental wellness. For this reason, panelists were encouraged to use their knowledge of the overall clinical and clinical mental health care issues we're facing now as a basis for informed predictions about what we may be facing after a nationwide vaccination campaign and beyond. Acknowledging the absence of adequate data and statistics, we also asked the panelists to recommend and discuss key actions that could be taken now and what outcomes-oriented research projects are needed.

Much of this discussion builds on the understanding of the unique behavioral health issues faced by males and has been covered in great depth by MHN in the core publication, "Behavioral Health Aspects of Depression and Anxiety in the American Male: Identifying Areas of Patient-Centered Outcome–Oriented Needs, Practices, and Future Research," (https://www.menshealthnetwork.org/library/depression-anxietymales-report-summary.pdf) as well as its companion material, "Determining the Efficacy and Scope of Behavioral Health, Gender-Specific Screening Tools for Males Benefitting Front Line Community Workers."

## **Panel Discussion Summary**

The panel engaged in a broad range of issues surrounding the clinical impact that the COVID-19 pandemic has had on overall ability to deliver health care to boys and men in America and how these clinical challenges have impacted their overall behavioral health and psychological wellbeing and their economic wellbeing. There is a general acknowledgement and understanding by all involved that many of the issues and concerns are not exclusive to male health care. However, the focus of the discussions was on the many salient parameters that make delivery of health care and the identification and management of behavioral health issues for boys and men especially challenging.

The panel addressed ten broad themes during the discussions. Each of these discussion themes was woven into the overall dialogue and formed the basis for developing consensus-driven recommendations. These are:

- A historical review and analysis of past pandemics and broad based epidemics and their overall impact on economics of their eras. Economic historians have attempted to create models of economic trends that might be used to forecast the economic impact of such events on global or large regional economies but conclude that since the social, economic, and fundamental structure of society are unique during each of the historical large scale medical events there are few overarching patterns that can be determined.
- How **the impacts of COVID-19 are unique** as compared to historical medically related economic downturns, and how they differ from economic depressions that are caused by fundamental economic instabilities. While COVID-19 has had a damaging impact on virtually all economies around the world, its impacts occurred during times of relative fundamental economic strength and stability in many countries, including the United States. This will make the economic recovery from COVID-19 easier in many sectors, and on a macro-level, economies should return to robust levels

quickly. There will, however, also be significant structural changes and innovations in the way businesses (including health care business) resume activities which were that are driven by the work-arounds.

- Review of the **integral relationship between economic downturns during the pandemic** and the stresses those downturns—and prolonged periods of being in "crisis mode" have had on many segments of the US population. Even among those whose economic status is relatively stable, the prolonged chaos and widespread uncertainty about how COVID-19 will play out have caused great stress and anxiety. The unique ways that these pressures have impacted boys and men in different demographics was carefully reviewed and considered. The panel also provided perspectives on the types of systemic changes that need to be addressed to better manage future broad-based medical emergencies.
- The **impact of COVID-19 on medical care.** The impact of COVID-19 on medical care. These included broader utilization of technologic approaches to care and patient monitoring and support, a year-plus long lag in adequate treatment of chronic conditions and the demise of many smaller independent health care practices and business. The panel looked at opportunities to evaluate how new models of care may be carried through, reimbursed, and evaluated for comparative effectiveness.
- Fundamental **deficiencies in health care delivery.** These include: health disparities as they apply to men and boys, particularly in the area of mental health: the impact of systemic racism; the lack of male gender and ethnic diversity in the health care workforce across professions: and the lack of training of professionals in comprehensive male health care.
- The **unique impact of COVID-19 on boys and men** both physically (which is underscored by higher death rates in males globally as well as in the US) and emotionally because of difficulties bringing males to engage in health care, particularly mental health care. There was also a discussion of some of the myriad factors that have led to what many men's health experts believe to be drastic under-reporting and under-diagnosis of significant mental health issues in males. The links between perceptions of appropriate masculine roles and how those roles are impacted by economic downturns was also discussed.
- **Vaccine-hesitancy** as a general concern, and a concern with regard to pandemic vaccination efforts and implications on future needs for vaccinations, including perhaps for COVID mutations. Many of the factors involved in vaccine hesitancy, including the role of media and ingrained distrust by many communities, in particular minority communities, was discussed. Various potential approaches to developing educational outreach using peer-to-peer approaches and training community men's health educators to address this, and other fundamental men's health issues, were discussed.
- The **long term medical, social, and psychological impacts of COVID-19,** including lapse in chronic care, youth education, and long-term physical impacts. The panel discussed the need to reassess mental health resources and workforce to address post-COVID praumatic stress disorder, which may affect millions, including children, and the need to develop a better understanding of COVID-19 long-hauler syndrome to prepare providers—particularly those in primary care—to properly recognize and mange this new and unique cluster of medical problems.

• A discussion of **approaches that may be helpful** in providing more rapid and flexible economic safety nets for individuals, families, and businesses when faced with another medically induced economic downturn.

Each of these discussion themes was woven into the overall dialogue and formed the basis for developing consensus-driven recommendations. Individual panel members and panel consensus recommendations for key action items and research needs to address many of these areas are provided.

## **Next Steps**

Based on the day's discussions, the expert panel provided nineteen 19 recommendations for next stapes to take to: better deal with the current pandemic and its immediate aftermath; better prepare and guide decision making for any widespread future medical emergencies; and research issues that should be considered for funding to help enlighten policy and practices. These are:

- Rapidly provide better and more direct financial assistance to individual and small business without the need for additional, laborious, and lengthy legislation.
- Conduct research into the various ways that COVID-19 adversely impacted local level health care providers and services; develop approaches to allow for care to continue during protracted emergencies; assess the outcome of various options to provide care; determine what support networks can be put into play to put economic support, specifically for health provider businesses.
- Conduct a series of research studies in various economic sectors of the population that are designed to help better understand how physical and emotional stress from circumstances such as a pandemic impact that population's overall health and wellbeing.
- Develop and conduct population-based studies to identify key determinates of resilience and distress. Such studies are needed to better support children in the event of another widespread medical emergency such as a pandemic.
- Research and compare the extent, nature, and consequences of different strategies to help pandemic-affected children manage these adverse childhood experiences (ACEs). This is of significant importance, not only in the current pandemic but also as a template to learn how to manage medical emergencyrelated ACEs in the future.

- Develop and conduct a series of shortand long-term comparative research projects that new technologies such as telemedicine, telepsychiatry and virtualsupport groups and apps need to mature.
- Establish, and evaluate in a comparative, outcomes-oriented manner new models, including integrated physical and mental health services as well as and newer evolving technologies.
- Encourage private and public third-party payers to address the lack of parity between reimbursement for mental health and physical health diagnosis and management in a manner that will encourage these types of services, particularly in primary care.
- Support programs that have been locally successful in addressing deficiencies in determinants of health in at-risk populations for further development and expansion into other communities.
- Conduct broad-based research about the myriad factors that contribute to vaccinehesitancy. It's equally important to conduct comparative research to identify communication, educational, and other important aspects of restoring trust in health care and science. For this work to be truly meaningful and useful in developing population-stratified and directed mitigation, it must be stratified by gender, population, and socioeconomic and racial demographics.

- Assess and optimize various communications approaches between key stake holders in the informationcascade from laboratory to the general public.
- Study vaccine hesitancy in order to create strategies to overcome it and develop large-scale vaccination campaigns for all levels of vaccine acceptance. Use of peer-to-peer groups may be particularly effective in minority communities and communities that have comparatively fewer health care resources.
- Develop effective approaches to community-based outreach to boys and men about health and wellness. It would also be helpful to develop field training programs for peer-level community men's health educators and evaluate their outcomes in reaching males with critical health messages and motivating them to positive actions.
- Encourage and support adoption of newer technologies such as telehealth and remote data monitoring.to deliver health care.
- Encourage and support development of "hybrid" approaches to care management, including multiple platforms such as telehealth, telepsychiatry, remote patient data monitoring and hands-on diagnostics.
- Assess the impact of these newer healthcare delivery technologies and approaches in general and specifically with a focus on their impact on rural and

underserved communities or patients with limited access to in-person medical care for any reason.

- Asses the overall structure of reimbursement for new technologically enabled approaches to care to bring parity. Where the lack of accessible health services is adversely impacting determinants of health or care delivery, promote reimbursement plans that would encourage utilization of these approaches.
- Conduct a workforce assessment for all health professionals. Such an assessment would examine professional workforce needs in the context of the changing demographics of the country and would help identify gaps and opportunities.
  Similarly, health care professional program recruiting approaches, financialassistance models, and career opportunity engagement at the secondary and early college levels should be examined to identify, implement, and assess various approaches to addressing these personnel needs.
- A review of training components in comprehensive male health in professional programs should be undertaken to identify opportunities to better train providers in delivering gender-specific care for men. In order to effect such change professional credentialing organizations need to incorporate male health management more broadly in certification competencies.

# Main Monograph

# **Conference Background and Support**

The following report is based on an expert panel convened on January 8, 2021 by Men's Health Network, (MHN), which brought together a cross-section of experts from private and public entities involved in clinical care and health care advocacy for boys and men. This program, entitled "The Impact of COVID-19 On Behavioral Health of American Males: COVID-19-Related Economic Impacts," was in part funded by a supplemental funding program to cover important topics related to the COVID-19 pandemic through the PCORI Engagement Award Initiative (EAIN00095).<sup>2</sup> PCORI has been a leader in providing funding for work to enhance patient engagement in mental health management and has expanded their funding to help provide important information about better understanding and managing the COVID-19 pandemic. To comply with social distancing and public health safety necessitated by the COVID-19 global pandemic, this conference was held electronically. The contents of this conference and manuscript do not necessarily represent the views of PCORI, its board of governors, or its methodology committee.

This conference builds on expert consensus panels convened by the Men's Health Network and partially funded by PCORI held in May 2019 (https://menshealthnetwork.org/malebehavioralhealth), September 2020 (in press), and November 2020 (in press) that examined in-depth the underlying issues of depression, anxiety, and suicidality in American males and identified key areas to pursue to improve the emotional wellness and care of boys and men.

# **Defining the Problem**

From the bubonic plague in the Middle Ages to the Spanish Flu outbreak near the end of World War I, in 1918, pandemics have had profound effects on society in general and on global and local economies. In the majority of recorded accounts of pandemics, the first part of the social order to become strained was

<sup>&</sup>lt;sup>2</sup> Patient-Centered Outcomes Research Institute. (n.d.). Engagement Award: Dissemination Initiative. Retrieved January 2021, from https://www.pcori.org/funding-opportunities/announcement/engagement-award-dissemination-initiative

the health care system. Since 2003, the international community has been preparing for a potential SARS outbreak of global proportions3. However, most experts believed that there were still deficiencies in the

world's—and especially the health-care sector's—ability to cope with such an outbreak. The dire concerns and warnings made nearly two-decades ago have proven prescient as the world reels from COVID-19.

There is much to learn about how to approach mental health issues associated with pandemics. The literature is replete with information from microbiologic, virologic, clinical, epidemiologic, emergency preparedness, and public-health perspectives, but there is a dearth of information about psychiatric care of individuals and communities that are caught up in the traumas and tragedies of a pandemic. Yet, all who work in the general healthcare field agree that the mental health component is extremely important. The economic chaos caused by the virus itself and the essential mitigation measures that led to lockdowns of large segments of the economy and unemployment or significantly reduced employment on many demographics created financial stress that, in turn, led to increased

Plagues Throughout Recorded HistoryThe Athenian Plague - 430 B.C.The Antonine Plague - 165-180 B.C.The Justinian Plague - Mid-6<sup>th</sup> Century A.C.The Black Death - 1334-1400 A.C.Spanish Flu Pandemic - 1918–1920Smallpox Outbreak in Former Yugoslavia - 1972HIV Pandemic - early-1980s-ongoingSevere Acute Respiratory Syndrome (SARS) - mid-2003Swine Flu H1N1/09 Pandemic - early-2009-mid-2010Ebola Outbreak - 2014–2016Zika - 2015–2016Disease X\* - Postulated placeholder designation

levels of psychological stress and associated social and physical problems.

One of the major challenges to ensuring that all those affected with COVID-related emotional trauma have access to treatment is that, as Men's Health Network's Jimmy Boyd, an advocate for men's health for over 45 years, notes, "boys and men express emotional hurt, needs, and concerns very differently than do women, and many of the ways males express this are not generally recognized as related to psychological issues by either the person expressing them or to clinicians."

<sup>&</sup>lt;sup>3</sup> Madhav, N., Oppenheim, B., Gallivan, M., Mulembakani, P., Rubin, E., Wolfe, N. (2017). Pandemics: Risks, Impacts, and Mitigation. In D. T. Jamison (Eds.) et. al., *Disease Control Priorities: Improving Health and Reducing Poverty*. (3rd ed.). The International Bank for Reconstruction and Development / The World Bank.

As a result, men are less likely to recognize their own behavioral health needs, which makes them less likely to seek help for mental health issues. Clinicians are also not particularly in-tune with (or trained to recognize) how men communicate about psychological problems and often miss important symptoms. In addition, none of the major screening tools assessed by MHN and members of its board of scientific advisors are developed with men in mind, so they tend to underdiagnose men's mental health issues. This, in turn, leads to a variety of problems in creating approaches to deal with male mental-health issues, both at the clinical and public policy levels.

Comparison of Male and Female Behaviors with Depression <sup>4</sup>				
Typical Male Responses	Typical Female Responses			
Blames others	Blames themselves			
Feel irritable	Feel sad			
Become unforgiving	Frequently tearful			
Less satisfying sleep pattern	Sleeps more than usual			
Heightened suspiciousness	Feeling of vulnerability			
Guarded	Easily hurt			
Overly/covertly hostile	Tries to be nice regardless			
Hides depression	Show obvious signs of depression			
The World is against them	Feel set-up to fail			
Frequently restless/agitated	Feel nervous/slowing down			
Sudden rage	Anxiety attacks			
Loss of anger-control	Strives to maintain anger-control			
Emotional blunting/numbness	Overwhelmed by emotions			
Pushes others away	Allows violation of personal boundaries			
Ashamed of who they are	Feelings of guilt for what they do			
Seeks praise/frustrated without it	Uncomfortable with praise			
Denies weakness/self-doubts	Accepts weakness/self-doubt			
Fears failure	Fears success			
Top-dog status to feel safe	Blends-In to feel safe			
Alcohol, TV, sports and sex to cope	Food, friends and love to cope			
Wonder if they are "loved enough"	Wonder if "Am I lovable enough"			
Problems resolve if others treat them better	Being a better person resolve problems			

Adapted from https://www.atrainceu.com/node/1078)

<sup>&</sup>lt;sup>4</sup> Diamond, J. Depression: Gender Matters, Summary. (n.d.) ATrain Education, Continuing Education for Healthcare Professionals. https://www.atrainceu.com/node/1078

The substantial differences in the way that males and females think about and express emotional pain and trauma too often leads to misinterpretation and mismanagement of evolving psychological issues in boys and men. Important factors that influence how males express emotionality include stigma, society's negative feedback to male expressions of emotional hurt or concern, and the generalized reluctance—and resistance—boys and men have to seeking care for any reason.

The author of the book, *Psychiatry of Pandemics: A Mental Health Response to Infection Outbreak*, identifies six unique features of mental health responses in pandemic outbreaks:<sup>5</sup>

- Time lapse and disease modeling of pandemic outbreaks to help guide planning, approaches and progresses.
- Assess and manage the mental health burden on health workers.
- Begin aggressive social distancing and plan to address the profound impact that prolonged isolation and separation from families and their community may have. This not only needs to be considered in the context of the population at large but also for health care providers.
- Neuropsychiatric sequelae among survivors may warrant sustained mental health focus and attention including an expansion in resources to prevent and minimize long-term disabilities.
- Behavioral contagion and emotional epidemiology where managing concerns, fears, and misconceptions at the local community and broader public level become as important as treating individual patients.
- Precarious status of healthcare facilities and healthcare workers. In the midst of a pandemic outbreak, unlike in other disasters, healthcare facilities may transform from points of care to nodes of transmission, further jeopardizing public trust in the healthcare system and its ability to respond to the outbreak.

# Impact of Pandemics on Economics

#### General

The impact of pandemics and widespread epidemics have a profound impact on multiple parts of society. Historical writings about the bubonic plague's impact on society and the economics of the Middle Ages provide perspective on both the short- and long-term effects of the death of an estimated 75 million to 200 million people in Eurasia and North Africa (30-60% of the population in Europe). Generally regarded as the next largest pandemic, the Spanish Flu of 1918-19, which has been termed "the mother of all pandemics" infected an estimated 500 million people worldwide and killed an estimated 20-50 million globally.<sup>6</sup> While

<sup>&</sup>lt;sup>5</sup> Polšek, D. (2019). Psychiatry of Pandemics: A Mental Health Response to Infection Outbreak: (D. Huremović, Ed.). Springer International Publishing. https://doi.org/10.3325/cmj.2020.61.306

<sup>&</sup>lt;sup>6</sup> Taubenberger, J. K., Morens, D. M. (2006). 1918 Influenza: the mother of all pandemics. *Emerging infectious diseases*, 12(1), 15–22. https://doi.org/10.3201/eid1201.050979

the final chapter on the COVID-19 pandemic is far from written, few epidemiologists believe that it will be as devastating (in terms of lives lost or long-term economic impacts) as either The Plague or the Spanish Flu. Yet, the effects of COVID-19 have been profound and saddening.

The ways in which societies and economies have been affected by pandemics has been the subject of much historical and economic speculation and theory. Analysis of epidemics and pandemic impacts are complex and require extensive data on population, urbanization, prices, wages, and GDP, as well as an understanding of the overlays of social norms and world events at the time. While many have worked to develop potential predictive models as to how a future pandemic might impact the economy, no strong realistic model has yet been put forward. It is generally accepted that pandemics cause multiple changes to the economic environment, thereby necessitating a multifaceted response by government. Yet, in examining exactly what these short- and long-term responses (and their overall impact) are, the only commonalty is the immediate suppression of economic activity. Unfortunately, little if any common ground exists in how these economic setbacks qualitatively or quantitatively played out in the long-term. Historian, Robert Peckham who has studied and written extensively on this topic, states that "analogies create blind spots" in epidemic and pandemic economic analysis approaches. He further maintains that models are virtually impossible because "…each epidemic takes place in its own context." <sup>7</sup>

Society and medical practice learned many hard lessons during these cataclysmic events, and as devastating as the two aforementioned benchmark pandemics were, they were eventually brought under control and adverse impacts were reversed. In addition, in the case of The Plague, many of the social and economic inequities that existed prior to the outbreak ceased to exist (or were mitigated) afterward, as European society engaged in purposeful restructuring.<sup>8, 9</sup>

When looking at the long-term impacts of various pandemics on macroeconomic trends, historians often cite a few interesting salutary effects on regions or society. For example, while several plagues during the early Renaissance (1348 - 1450) reduced the Eurasian population dramatically, they also had a beneficial effect on the economy. Because of the dramatic population decline, survivors enjoyed remarkable improvements in work available, labor productivity, income, and standard of living. These net-favorable impacts on the economic environment set up the Renaissance in culture, art, and politics and the spread of new kinds of consumer demand.<sup>10</sup>

<sup>&</sup>lt;sup>7</sup> Peckham, R. (2020). COVID-19 And the Anti-lessons of history. *The Lancet*, 395(10227) 850-852. <u>https://doi.org/10.1016/S0140-6736(20)30468-2</u>

 <sup>&</sup>lt;sup>8</sup> Black Death. (2010, September 17). History.com. Retrieved January 2020, from <u>https://www.history.com/topics/middle-ages/black-death</u>
<sup>9</sup> Pappas, G., Kiriaze, I. J., Giannakis, P., Falagas, M. E. (2009). Psychosocial consequences of infectious diseases. *Clinical microbiology and infection:*

the official publication of the European Society of Clinical Microbiology and Infectious Diseases, 15(8), 743–747. <u>https://doi.org/10.1111/j.1469-</u>0691.2009.02947.x

<sup>&</sup>lt;sup>10</sup> Malanima, P. (2018). Italy in the Renaissance: a leading economy in the European context, 1350–1550. *The Economic History Review*, 71(1), 3-30. https://doi.org/10.1111/ehr.12650

In a 2017 scholarly review of the impact of plagues and pandemics, authors Madhav, Oppenheim, and their colleagues point out that:

- Pandemics can cause significant, widespread increases in morbidity and mortality and have disproportionately higher mortality impacts on lower- and middle-income countries and communities.
- Pandemics can cause economic damage through multiple channels, including short-term fiscal shocks and longer-term negative shocks to economic growth.
- Individual behavioral changes, such as fear-induced aversion to workplaces and other public gathering places, are a primary cause of negative shocks to economic growth during pandemics.
- Some pandemic mitigation measures can cause significant social and economic disruption.
- In countries with weak institutions and legacies of political instability, pandemics can increase political stresses and tensions. In these contexts, outbreak response measures such as quarantines have sparked violence and tension between states and citizens.

A government's ability to manage the impact of pandemics on public health and overall medical care is dependent on a host of core capacity factors, the most important of which are:<sup>11</sup>

- Public health infrastructure capable of identifying, tracing, managing, and treating cases
- Physical and communications infrastructure sufficient to channel information and resources
- Fundamental bureaucratic and public management capacities
- Capacity to mobilize financial resources to pay for disease response and weather the economic shock of the outbreak
- Ability to undertake effective risk communications.

# The Unique Impact of the COVID-19 Pandemic on a Global Economy

The economic, political, technologic, social, and communications environments that surrounded the COVID-19 pandemic are certainly unique when compared to historical pandemics. They were also unique when compared to the economic downturn that preceded it in 2008.

Government responses to the COVID-19 pandemic have resulted in significant upheaval to everyday life around the world. In the United States, this has involved not only economic and social disruptions but also limitations to many of Americans' cherished freedoms and an increasingly expansive government role, as it attempts to mitigate the spread of the virus while also implementing treatment triage and vaccination

<sup>&</sup>lt;sup>11</sup> Greenhill, K.M., Oppenheim, B. (2017) Rumor Has It: The Adoption of Unverified Information in Conflict Zones. International Studies Quarterly, 61(3), 660–676. https://doi.org/10.1093/isq/sqx015

policy. Together with the well-publicized infection rate, the virus's direct and indirect death toll have had a tremendous effect on families, communities, and our country as a whole. They've caused immeasurable grief, anxiety, and other behavioral health issues and put unprecedented strain on a healthcare infrastructure that, even before being challenged by the virus, was barely adequate to meet the needs of the people.

Jean Bonhomme, MD, MPH, founder and Executive Director of the National Black Men's Health Network,

Social distancing, stay-at-home polices, and other personal mitigation requirements, whether voluntary or imposed by governments with penalties, have led to social isolation and loneliness across sociologic and economic strata. Government policies are also, many feel, rapidly reconfiguring family structures, our education system, business models, and overall economic security in a way that makes it nearly impossible for some segments of our society to meet their basic needs for food and shelter.

believes that the isolation factor is one of the biggest differences between the 2019 pandemic and other public health crisis in terms of our return to a normal economy. The fact that people are not able to get together as a caring community to help with recovery impacts many important sectors of our communities, including small businesses. Mitigation requirements and fear have also hurt our ability to collectively address some of the problems that members of our communities are dealing with. This certainly is different from the community response to crises, where community members come together to help and support each other. The inability of small business and individuals to provide traditional support networks has a detrimental impact on the psychology of a community and of its members. It also has implications for the community's economic health.

Social distancing, stay-at-home polices, and other personal mitigation requirements, whether voluntary or imposed by governments with penalties, have led to social isolation and loneliness across sociologic and economic strata. Government policies are also, many feel, rapidly reconfiguring family structures, our education system, business models, and overall economic security in a way that makes it nearly impossible for some segments of our society to meet their basic needs for food and shelter. That has triggered a cascade of consequences that may be apparent only years after the virus itself is brought under control.

As a member of the planning committee for this conference series, Bonhomme set the underlying platform for our dialogue. He postulates that COVID-19 is actually three separate pandemics: (1) the clinical impact of the virus itself, (2) the economic and social effects of mandatory and voluntary mitigation techniques, and (3) the secondary impact resulting from addiction, substance abuse, and other self-directed and harmful coping mechanisms that people have adapted. Each of the "sub-pandemics" has created significant emotional havoc, the behavioral and psychological effects of which will likely continue for many years.

Wayne Winegarden, Ph.D., Senior Fellow in Business and Economics and the Director of the Center for Medical Economics and Innovation at the Pacific Research Institute, provided important context for the economic impacts of COVID-19 on America's economy and citizens. He started out on a positive note, stating that he and most economists believe that there is a way out of the current difficult economic circumstances and that the subsequent mental-health impacts of these downturns will lessen over time. His optimistic view is based, in part, on the economic sectors that have been hardest hit by these downturns. It's very important to understand that the COVID-19's economic impact has been unique, and doesn't fit the pattern of many other economic downturns in modern history, says Winegarden. The 2008 US economic downturn affected a broader range of sectors than COVID-19 has, plus the *way* the economic downturn has hit is also different. The Great Recession of 2008, which is generally regarded as the worst depression since the 1930s, was caused largely by problems in the financial sectors of the global economy. Specifically, too many financial institutions were taking on too much risk and selling investment products and mortgages that were fundamentally unsound. There was also significant, poorly collateralized borrowing by consumers and corporations. Add in poor government oversight and regulation of the financial sectors, and the result was a catastrophic tipping point.

What we're experiencing during the COVID-19 pandemic is very different. Financial sectors and business fundamentals at the time the pandemic hit had never been stronger, particularly in the US and other G7 countries. Markets were strong, consumer credit and confidence were in comfortable territory, and unemployment in virtually all demographics was at (or close to) their lowest levels in the modern era. Many who've studied the economics of the 2019 pandemic have speculated that had COVID hit during the 2008 financial crisis, we would be looking at a much more dire set of circumstances and a grimmer hope for reasonably quick recovery in most sectors.

Unlike the pattern in typical downturns, during the COVID-19 pandemic period, the majority of white-collar incomes have been minimally affected, and, in several demographics have followed a rather typical growth curve. Incomes have also risen for the top few percent of earners. Unfortunately, lower tier wage earners have suffered intensely and dramatically. Small business have been hit hard, particularly in the service

sector, (e.g., restaurants, personal services such as hair care, and entertainment). But large business, which make up the bulk of the investment markets, have done quite well and several, such as on-line retailers, have enjoyed dramatic growth. In addition, as the way people work and receive health care has changed in response to the pandemic, fledgling business sectors (such as telehealth and online meeting platforms like Zoom) have gotten a tremendous boost, one that absent COVID, might not have happened.

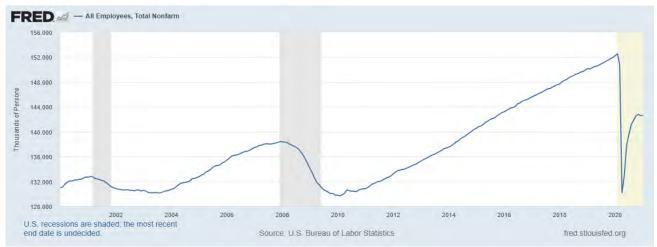
While some companies have benefitted from the changes brought on by COVID, others, particularly in the service sector, may not recover at all. "We're seeing a shift in many sectors that employ lower- and middletier wage earners," said Winegarden. "If these wage earners aren't re-trained to enter new work environments, there will be substantial adverse impact on them. If we don't manage these trends, this demographic of otherwise stable wage earners will not only suffer continued bad economic impacts but also increased mental health impacts and worse overall health outcomes." Winegarden noted that as we rebuild our economies and seek to provide solutions, we need to pay special attention to these sectors, otherwise they'll be left behind as the post-COVID-19 economy evolves and grows.

The fact that the economic impacts of COVID-19 likely won't be as bad as those of previous economic downturns and recessions in no way minimizes COVID-19's devastating effects on the global economy. The path forward to economic recovery is definable, and at least during the first quarter of 2021, seems to be achievable.

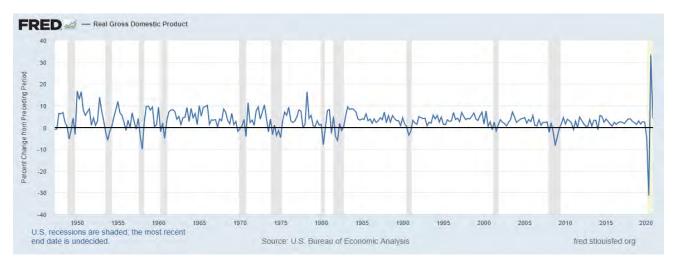
# **COVID-19's Impact on Key National Economic Indicators**

In response to the Covid-19 pandemic, widespread lockdown restrictions were imposed, with the objectives of keeping the virus at bay, hospitals and medical resources from being overwhelmed, and avoiding rapid depletion of medical products to the point of disaster. The effects of these lockdowns on the global economy were immense and happened very rapidly. This led to dramatic unemployment in many sectors and to historic declines in gross domestic product (GDP) indicators in most all industrialized countries.

#### All Employees Decline <sup>12</sup>



#### All Employees Decline 13



Given these circumstances, there is a need going forward (KEY POINT) to study a range of questions on the specific impacts of physical and mental health on various wage earners (with data that properly examines important modifying factors including gender), and to conduct additional research on the optimal ways to address these health deficiencies.

The pandemic has also had a dramatic impact on global investment markets. Winegarden noted that the stock market has done very well in many sectors (at least up through the first quarter of 2021), and we are

<sup>&</sup>lt;sup>12</sup> U.S. Bureau of Labor Statistics. (2021, March 16). *Unemployment Rate.* FRED, Federal Reserve Bank of St. Louis. <u>https://fred.stlouisfed.org/series/UNRATE</u>

<sup>&</sup>lt;sup>13</sup> U.S. Bureau of Labor Statistics. (2021, March 16). *Real Gross Domestic Product*. FRED, Federal Reserve Bank of St. Louis. https://fred.stlouisfed.org/series/A191RL102255BEA

still reaching all-time highs. That said, we must still understand that there is a range of financial risks in global financial markets that can at any point spin out of control and could burst the price bubble. COVID-19 related financial risks are real and any number of "Black-Swan" (huge, unanticipated) events could make the US economy and investment income vulnerable. Investment markets, national economies, and personal economies move differently, but they're all inextricably linked. Investments play a crucial role in the financial stability of many middle-to-upper-income individuals and families. This is particularly true for seniors and for virtually any worker who has a financial stake in a pension plan. Not surprisingly, early in the pandemic, markets reacted somewhat volatilely and produced a great deal of anxiety in response to the uncertainty of how they would evolve over time. Fortunately, volatility has subsided. Graphic 5 illustrates five parameters and trends that markets went through during the pandemic.

#### Investment Market Trends Due to COVID-1914,15,16

#### • Losses Across the Board During First Months of the Pandemic

As mitigation measures began to be instituted between mid-January 2020 and early Spring, virtually every sector in markets across the globe experienced dramatic downturns. These downturns began to fade in several sectors over the next three financial quarters, but investors' (particularly smaller ones') anxiety and continued concern about instability, were palpable.

#### • Many Tech-Stocks Skyrocketed

As small businesses, health services, and education adapted to a new normal, in part by adopting new technologies, many tech-based businesses saw their stock price rise and, as we enter the second quarter of 2021, are continuing to post robust gains. Yet, as more money enters new markets, the need to monitor and assess who the winners and losers may be and how sustainable any particular tech-sector is, has renewed investor tension.

#### Commodity Sectors Continue to Be Volatile and Less Predictable

Agriculture, precious metals, and crude oil all exhibited dramatic volatility early on, and while volatility has lessened, these investment vehicles, which have a particularly important effect on families involved in agriculture, continue to show some instability and have uncertain forecasts for the future.

#### • Healthcare Sector Stocks Were Hard Hit and Are Now in Recovery

During the first few quarters of the pandemic, healthcare provider stocks lost significant value. While many—particularly in the hospital sector—are still moderately depressed, in part because of decreases in so-called elective procedures and decreased patient visits, it is expected that these markets will rebound and may even see substantial growth. It should be recognized that stock-

<sup>&</sup>lt;sup>14</sup> Partida, D. (2020). 5 Ways COVID Impacted the Stock Market. Internal Policy Digest. <u>https://intpolicydigest.org/5-ways-covid-impacted-the-stock-market/</u>

<sup>&</sup>lt;sup>15</sup> OECD. (2020 March). Global Financial Markets Policy Responses to COVID-19. <u>http://www.oecd.org/coronavirus/policy-responses/global-financial-markets-policy-responses-to-covid-19-2d98c7e0/#section-d1e53</u>

<sup>&</sup>lt;sup>16</sup> Staples, M. (2020). COVID-19, Soaring Stock Markets and the Implication for Business. World Economic Forum. <u>https://www.weforum.org/agenda/2020/10/covid19-implications-business-stock-technology-agility/</u>

related trends don't necessarily translate into the financial gains trends for smaller, privately owned healthcare related practices which had to scale back drastically or close. These small businesses are still experiencing economic tensions.

#### • Markets Have Seen an Increase in New Investors

Because of historically low share prices there has been a surge of new investors, particularly younger ones and those who are new to investment markets. These inexperienced investors may be somewhat less skilled in investing and while there may be great opportunity, it remains to be seen whether those opportunities will translated into intermediate and long-terms gains for these individuals.

#### Long-Term Impacts on Market Sectors Is Largely Unknown and Unpredictable

There are myriad unpredictable factors that could once again cause anxiety in the investment market. These include the sustainability of tech-solutions to the economy and potential trends in the microbiologic course of the COVID-19 virus. One of the most difficult aspects to predict is whether we will achieve global "heard-immunity" and, if we do, whether that will successfully keep more problematic viral mutations at bay. The good news is that while most infectious disease experts predict that another pandemic is inevitable, ma ny economists are predicting that it may present similar—and hopefully manageable—changes to the economy.

So, in most wage earner sectors, there is a fundamental stability to personal income this time around. There is also a rather strong tax base and good tax fundamentals, because the income of higher wage earners and business has grown and the overall tax base is, by-in-large, fairly steady and will remain mostly intact as we come out of the immediate COVID-19 period. Similarly, the stock market is very healthy, which contributes to the tax base and maintains strong fundamentals for market-listed businesses.

Brott, however, is somewhat more pessimistic. He stated that, given the trillions of dollars federal and state governments have already paid in economic stimulus, tax breaks, unemployment compensation, and other programs, it's highly likely that Americans' will see higher taxes soon. Depending on the size of the increases, those higher taxes could result in decreased spending in sectors that are already suffering.

Several on the panel added that while many businesses have fallen on hard times, other business such as Zoom, VFairs and electronic educational platforms have developed and flourished in the "electronic business" world. Many of these new business models will continue to thrive in the post-COVID-19 world. Giorgianni noted that economic historians generally agree that because every pandemic presents unique sets of conditions, accurate predictions are difficult to make.

Yet, while there is hope for a reasonable macroeconomic recovery, too many people in the United States and globally—particularly those who were already in difficult economic circumstances before the pandemic hit—have experienced devastating circumstances, such as isolation, loneliness, domestic violence, and substance abuse that can cause real, measurable adverse impacts on a population's mental wellness and outlook. In addition, COVID-19 has brought to light many longstanding weaknesses in our public health infrastructure, resources, health care policy, and delivery. The pandemic has also uncovered underlying health disparities, including those that effect boys and men (especially boys and men of color) in provision of care, access to care, and willingness to seek care. These latter deficiencies are directly related COVID's disproportionately high morbidity and mortality among those who are already at high risk for negative outcomes and death.

Giorgianni noted that the economic impacts of the pandemic that we are seeing now are just the tip of the iceberg. While many of the indicators suggest that the economy will return to its robust, pre-pandemic levels, this will take time. It may not be until well into 2022 before certain sectors (healthcare, for example) and many individuals recover—if they ever do. As a result, large swaths of our population will have been dealing with significant financial stress—and the associated psychological challenges—for close to three years.

Once the economic recovery gets underway, many governments, businesses, families, and individuals will have to begin servicing the tremendous amount of debt they incurred during the pandemic. Some will recover. Others, especially small businesses that not only took on debt but also lost a large portion of their customer base to online retailers, will not.

Because every global event is unique, it's not possible to predict exactly how the effects of COVID-19 will play out in the US and global economies. That said, many experts are willing to speculate.<sup>17</sup>

### Potential Global Economic Trends and Changes Post-COVID-19

(Adapted from What the Economy will Look Like after COVID-19, op. cit.)

#### • The global economic structure will evolve.

Mitigation efforts forced many changes in the ways businesses and people do things, including how the workplace is structured, how health care and education are delivered, and how developmental sciences are done. For example, the COVID-19 vaccines were in large part developed with a business, scientific, regulatory and manufacturing workforce that was doing a large part of their work from remote-locations, mostly from their homes. In addition, most of us made changes to the activities that are part of our daily lives, such as cooking, shopping, exercising, and entertainment. While we'll undoubtedly return to our pre-pandemic habits in some areas, other changes will become permanent and still others will hybridize. Obviously, these functions will have an impact on various economic sectors.

<sup>&</sup>lt;sup>17</sup> Gwartney, J. D. (2020). *The Economy after COVID-19*. American Institute of Economic Research. https://www.aier.org/article/the-economy-after-covid-19/

#### • Government debt will affect growth.

Governments across the globe have taken on massive amounts of debt to both fight the pandemic and to support critical infrastructure, businesses, and their citizens. These necessary rainy-day expenditures in the US (as of 1Q21) have pushed the national debt to approximately \$30 trillion, a historical high equal to approximately 140 percent of the US GDP. Currently, interest rates are low, which will reduce the cost of servicing this debt. This debt load will, however, inevitably require higher taxes on substantial segments of the economy. It may also result in the Treasury printing more money, a move that will eventually bring inflation.

#### • Fed monetary policy is not infallible.

Monetary policy exists to impact both production and prices, but there's usually a time lag between the two. Because of the broad and deep impacts of the pandemic on the economy and the need to reopen segments of the economy slowly, federal government fiscal policymakers may find it difficult to maintain price stability as various recovery phases play out. Such uncertainty will lead to economic instability and could very well slow down overall economic recovery and GDP growth.

#### • Government regulations in many sectors, including health care, will be reassessed.

If regulatory reforms that facilitated telemedicine, the provision of healthcare and other services across state boundaries, and increased the speed of developing life-saving drugs made sense during the COVID-19 crisis, why not make them permanent? Removing rules, regulations, licenses, and certifications that act as entry barriers, rather than protect public safety, could make the U,S. economy more flexible and more resilient to future shocks from pandemics and other sources.

 International trade and travel will be restricted for the foreseeable future.

Some in the United States and several other countries believe that China covered up the dangers of the COVID-19 virus. As a result, "There is no doubt the economy is positioned for growth in 2021, but how much growth comes down to a single noneconomic force – the coronavirus. I am optimistic about improving macroeconomic conditions as COVID-19 infections decline and distribution of vaccines becomes more widespread. ...The pandemic remains the largest uncertainty and the biggest risk the economy faces in 2021."

> National Retail Federation chief economist Jack Kleinhenz

several governments are considering trade restrictions on China. The United States and other countries have already imposed restrictions on the import of health care equipment such as ventilators and respirators during the crisis, not only as a matter of policy, but also because of concerns about quality. In addition, many countries including the United States are developing policies and making infrastructure changes to make them less reliant on potentially hostile countries for critical supplies such as health care products. Such supply-chain changes will have both positive and negative impacts on different sectors of the economy and will undoubtedly be a factor in consumer prices.

• A ratchetting-up effect is likely in government expenditures, regulations, and involvement in daily lives of citizens and business.

It is generally recognized that government involvement, once established—particularly in response to crisis—is rarely pulled back to the pre-crisis level.

## **COVID Mortality Impact on Boys and Men**

There is ample and growing epidemiologic data that clearly shows that male deaths due to COVID exceed female deaths both globally and across all ages and races. This has sociologic, structural, and economic implications for many families and communities. This gender jarring disparity has been evident from the earliest days of the pandemic, as evidenced by a February 2020 article published in *The Lancet* by Sun, et.al., entitled "Early Epidemiologic Analysis of the Coronavirus 2019 Outbreak Based on Crowdsourced Data: A Population Level Observational Study." As the pandemic has progressed, the disproportionately high impact on both morbidity and mortality in men has remained.<sup>18</sup>

Giorgianni, noted that since early 2020, MHN has repeatedly expressed concern about the growing disparity between men and women when it comes to COVID morbidity and mortality. Other men's health experts and advocates have joined MHN in expressing concern that not enough attention was being paid to the COVID-19 gender gap and the underlying reasons for the higher mortality in men.<sup>19</sup> The most recent information on this is in Graphic 6 which is adapted from data published by the *Global Health 5050* report, which tracked various epidemiologic and statistical data on COVID from close to 130 countries and is representative of experience with the pandemic globally. The data clearly demonstrate that while roughly equal numbers of males and females have contracted COVID-19, men's mortality and morbidity rates (including hospitalization rates) are significantly higher.<sup>20</sup>

Incident	No. Countries Reporting	Males Ratio	Females Ratio
Overall Cases	128	10	10
Hospitalizations	24	12	10
ICU Admits	17	19	10
Deaths	100	14	10
Confirmed Cases Died	87	14	10

#### **Global COVID-19 Clinical Impact Male Ratio Female**

(Adapted from Global Health 5050 Report https://globalhealth5050.org/the-sex-gender-and-covid-19-project/the-data-tracker/ - accessed 01/01/21)

- <sup>19</sup> Men's Health Network. (2020, June 1). June Is Recognized as Men's Health Month [Press release],
- (https://www.menshealthnetwork.org/library/mens-health-month-060120.pdf). Retrieved January 2021, from

<sup>&</sup>lt;sup>18</sup> Sun, K., J. C., & Viboud, C. (2020). Early epidemiological analysis of the coronavirus disease 2019 outbreak based on crowdsourced data: A population-level observational study. *The Lancet*, 2(4), 201-208. doi: https://doi.org/10.1016/S2589-7500(20)30026-1

https://www.menshealthnetwork.org/library/mens-health-month-060120.pdf

<sup>&</sup>lt;sup>20</sup> Global Health 5050. (2020). *The Sex, Gender and COVID19 Project*. Accessed January 2020 from <u>https://globalhealth5050.org/the-sex-gender-and-covid-19-project/the-data-tracker</u>

## **Overall Levels of Stress by Gender**

A survey by the Kaiser Family Foundation in March 2020 (summarized in Graphic 7), indicated that more women than men self-reported that they were worried or stressed or had negative impacts on their mental health. There are several problems with this survey. First, it was conducted at the very early stages of the pandemic, when the effects of mitigation and isolation were just beginning to be felt, and when the impact of economic loss and family disruptions were barely recognized. Second, this is self-reported data, and it is universally recognized that men under-report mental health issues compared to women by slightly more than half.<sup>21</sup> Given this magnitude of under-reporting, the true levels of male worry or feelings of stress due to COVID are likely significantly higher.

# Do you feel that worry or stress related to coronavirus has had a negative impact on your mental health or not?

	Major Negative Impact (% respondents)	Minor Negative Impact (% respondents)	No Impact (% respondents)	Do No Know if It Has an Impact (% respondents)
Men	11	16	63	1
	Male Net Negative	Impact: 27%	0	
Women	16*	20	71	1
	Female Net Negat	ive Impact: 36%*		

https://www.kff.org/coronavirus-covid-19/issue-brief/coronavirus-a-look-at-gender-differences-in-awareness-and-actions/

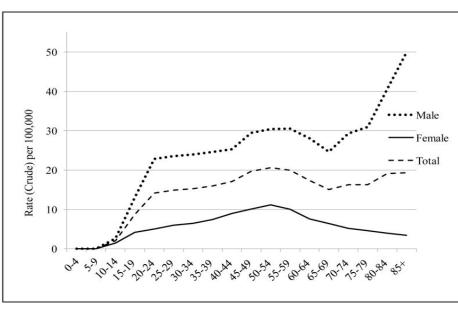
### Suicide: A Surrogate Marker for the Magnitude of the Impact of Stress

Because the actual number of cases of depression, anxiety, and other potentially lethal mental health conditions in males is under-represented in most data sets (in part because males are less likely to seek care for or be diagnosed with depression or other mental health conditions), suicide—the ultimate expression of depression and hopelessness, according to Men's Health Network and other experts in men's health—serves as an appropriate and revealing surrogate marker for the true extent of serious mental health issues in boys and men.

The male suicide rate (see Graphic 8) in the United States—typically three to four times higher than the female rate—has been a national tragedy for far too many years. In certain age categories (e.g., those 65 and older), men commit suicide at nearly ten times the rate of their female counterparts. And men's suicide rates are increasing, most notably in the 25-40 year old age group, a time of life when so many men are having their identity and self-worth challenged by a worldwide pandemic that may have cost them their jobs or forced them to close their businesses.

<sup>&</sup>lt;sup>21</sup> Smith, D. T., Mouzon, D. M., Elliott, M. (2018). Reviewing the Assumptions About Men's Mental Health: An Exploration of the Gender Binary. *American journal of men's health*, 12(1), 78–89. <u>https://doi.org/10.1177/1557988316630953</u>

While the magnitude of the actual impact of COVID-19 on mental health issues in boys and men may never be fully understood, there are some provocative estimates of the overall effect on suicide rates. The Well Being Trust and the Robert Graham Center for Policy Studies in Family Medicine have estimated that, short



# US Suicide Rates Total Compared to Male and Female Across Age Cohorts

term, as many of 75,000 deaths from drug or alcohol misuse or suicides will be directly attributed to despair (including that associated with the economic concerns wrought on people from COVID<sup>22</sup>). If general epidemiologic trends for suicide by gender hold, the vast majority of these (an estimated 50,000-55,000) will be in males.

In addition, the impact of isolation and loss of important social networks and support services for school age children, particularly young boys, has already led to an

CDC: Suicide Rising in the US, June 2018

increase in suicides among young boys. The media has reported on several high-profile deaths and some school districts are trying to understand and cope with this unprecedented and tragic increase. It's too early now to fully understand the overall effect that protracted school lockdowns will have on the generation of children who missed as much as a full year of in-class instruction, but it's clear that it has already begun to affect students' overall behavioral health and psychological wellbeing all levels of education. A through assessment of the impact of school closings, virtual learning, loss of social and safety networks offered within the educational systems must be conducted to better manage educational practices and their impact on the comprehensive psychological wellbeing of school-age and college students.

<sup>&</sup>lt;sup>22</sup> Well Being Trust and the Robert Graham Center. (2020, May 08). *Projected Deaths of Despair During COVID-19*. Retrieved January 2021, from <a href="https://wellbeingtrust.org/areas-of-focus/policy-and-advocacy/reports/projected-deaths-of-despair-during-covid-19/">https://wellbeingtrust.org/areas-of-focus/policy-and-advocacy/reports/projected-deaths-of-despair-during-covid-19/</a>

### Links Between Economic Downturns During COVID-19 and Emotional Distress

The panel spent a great deal of time discussing how COVID-driven economic factors and the already-poor recognition and management of mental illness in boys and men have combined to create even more emotional distress in males.

One of the more obvious impacts that COVID-19 has had on men's mental health is related to their ability (or inability) to work, noted Bonhomme. Men tend to identify very strongly with their work, and their ability to provide for themselves and their families is integral to their sense of self-worth. So not being able to work for most men, particularly in middle- and lower socioeconomic groups, is a tremendous source of financial and emotional anxiety, along with a loss of self-worth and self-esteem. Brott, noted that losing a job more often than not means losing one's health insurance, at least temporarily. That's bad enough for single men, but especially bad for families that are dependent on the father's or husband's employment for their coverage.

# What Community Members Can Do to Help Others

There is a great deal of evidence for the effectiveness of community involvement in improving mentalhealth and some social outcomes across social-ecological levels. Studies point to the importance of ongoing resources and training to maintaining long-term outcomes, explicit attention to ethics and processes to foster equitable partnerships, and policy reform to support sustainable healthcarecommunity collaborations.<sup>23, 24, 25</sup>

It would be difficult to overstate the role that community organizations, employers, and schools, particularly at the primary educational level, can play in combatting the stigma many males feel when considering whether to ask for help, and the disastrous trends in male mental health and suicide. The panel discussed many overarching concepts, approaches, and tactics to help engage boys and men in a dialogue about behavioral health issues, enhance community level solutions, and decrease the negative messages (such as "big boys don't cry," and "man up!") that are part of mental health stigma. These are found in Graphic below.

<sup>&</sup>lt;sup>23</sup> Chung, H., Rostanski, N., Glassberg, H., Pincus, H.A. (2016). Advancing Integration of Behavioral Health into Primary Care: A Continuum-Based Framework. United Hospital Fund and Montefiore Health System. <u>https://uhfnyc.org/assets/1476</u>.

<sup>&</sup>lt;sup>24</sup> Springgate, B. F., Wennerstrom, A., Meyers, D., Allen, C. E., Vannoy, S. D., Bentham, W., Wells, K. B. (2011). Building community resilience through mental health infrastructure and training in post-Katrina New Orleans. *Ethnicity & disease*, 21(3), 1–29. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3731130/

<sup>&</sup>lt;sup>25</sup> Springgate, B. F., Arevian, A. C., Wennerstrom, A., Johnson, A. J., Eisenman, D. P., Sugarman, O. K., Haywood, C. G., Trapido, E. J., Sherbourne, C. D., Everett, A., McCreary, M., Meyers, D., Kataoka, S., Tang, L., Sato, J., & Wells, K. B. (2018). Community Resilience Learning Collaborative and Research Network (C-LEARN): Study Protocol with Participatory Planning for a Randomized, Comparative Effectiveness Trial. *International journal of environmental research and public health*, 15(8), 1683. <u>https://doi.org/10.3390/ijerph15081683</u>

#### 15 Overarching Approaches and Tactics to Help Address Behavioral Health Needs at the Community Level

- Understand and utilize male-centric communications materials that focus on males' verbal preferences and images.
- Utilize materials, messaging, venues, and approaches that, in addition to being gender-sensitive, also address boy's and men's cultural, racial, generational, and sexual preferences and lifestyles.
- Create and utilize male-friendly settings, times, and locations to conduct programming and deliver messages.
- Develop partnerships with trusted and respected community members and deliver messages in places where males feel comfortable and trusting.
- Develop co-branded materials, programs, and program-hosts along with trusted and respected community- and men's health organizations.
- Develop partnerships with respected culturally distinctive groups and organizations in subcommunities.
- Support community-wide programs to raise awareness of male cultural diversity that fosters broad community understanding and appreciation for various cultural values.
- Develop person-to-person communication skills in community members to help them better use non-verbal cues to encourage trust and decrease perceived judgmentalism.
- Develop programs and communications strategies that focus on actions to address problems.
- Utilize true peer-to-peer networks that highlight male role-models who have experienced and overcome emotional problems.
- Encourage peer-to-peer support networks and programs that provide male, culturally identifiable role models who have themselves engaged successfully in their own journey of emotional health recognition, and management.
- Understand the unique needs, communications preferences, and emotional-pain cues for males in various high-risk occupations and professions.
- Provide the opportunity to partner with experts in program structure, evaluation, and reporting to help provide needed program evaluations and dissemination to other communities across the country.
- Develop and train those who interact with males in Emotional First-Aid skills (see below) across community demographics and settings.
- Create male-directed and managed networks, procedures, and training to health-care providers who provide referral and triage of boys and men in crisis which are compliant with HIPAA and other legal requirements for confidentiality of personal-identifiable information.

# Emotional First Aid (EFA)

One resource that can be used to address the often overwhelming emotional and psychological impacts of COVID-19 in the community is an effective, yet simple, technique called Emotional First Aid (EFA). This approach is being used more and more broadly in settings such as the workplace, community organizations, and service organizations. According to the psychologist, Guy Winch, Ph.D., just as we have bandages for cuts and scrapes, and are taught how to dress a wound or put ice on a sprain and then seek professional care as needed once the immediate physical injury is stabilized, we should also have simple skills (Graphic 10) at our disposal to help individuals stabilize their emotional injuries from traumatic events and get them to care to prevent those acute emotional traumas from developing into long-term serious consequences. There are programs in many locations across the country to train community members in techniques in EFA.

EFA is a derivative of Psychological First Aid (PFA) programs as applied to non-mental health/non-medical personnel in the community and workplace. PFA, according to the American Psychological Association,<sup>26</sup> is designed to assess the immediate concerns and needs of individuals in the aftermath of a disaster, and not to provide on-

#### The Five Essential Emotional First Aid Skills1

Adapted from When Tragedy Strikes

#### **Reach Out**

Make contact and establish rapport with the survivors or victims so that they feel connected to someone who cares about their circumstance.

#### Protect

Protect survivors or victims from further injury (either emotional, physical, or financial) which can be inflicted by others, circumstances, or by the inability of the victim to care for themselves.

#### Reassure

Help survivors or victims obtain the information needed to stabilize their situation in a timely manner.

#### Organize

Help survivors or victims develop a simple plan to take action so they can quickly regain a sense of control over their situation or circumstances.

#### Reinforce

Identify each victim's sources of personal strength, and then to do what's needed to help that person recognize, obtain, and hold onto them.

site therapy. It utilizes an initial disaster-response intervention with the goal of promoting safety, stabilizing survivors of disasters, and connecting individuals to help and resources. PFA is delivered to affected individuals by mental health professionals and other first responders.<sup>27</sup> The techniques of EFA and PFA are based on a set of life skills used by lay community members and emergency responders to provide emotional support and stability to individuals who appear to be in emotional crisis following a traumatic event and to help bring them to appropriate professional care if needed.

<sup>&</sup>lt;sup>26</sup> <u>https://www.apa.org/practice/programs/dmhi/psychological-first-aid</u>

<sup>&</sup>lt;sup>27</sup> The 5 Emotional First Aid Skills. (n.d.). Trauma Intervention Program. <u>http://www.whentragedystrikes.org/5\_efa\_skills.htm</u>

Many of the members of Men's Health Network's (MHN) Board of Scientific Advisors are strong proponents of EFA and PFA and believe that it's especially important to develop and nurture emotional first-aid programs and community-based training programs. However, MHN recognizes that while several such training programs exist, as they're configured, they generally need to do a better job of encompassing male-specific techniques and sensitivities. Giorgianni noted that there are also some excellent PFA programs for mental health and emergency preparedness personnel that can be rolled out to help these key members of the health care system learn techniques and how to utilize them in their work.

In his book on the topic, Winch suggests six pragmatic things to do when working through an emotional first-aid episode. They are: (1) recognize when you're in emotional pain; (2) be gentle and compassionate with yourself; (3) distract yourself from rumination; (4) redefine your view of failure; (5) find meaning in loss; and (6) pay attention to your psychological health on a regular basis. These seemingly simple steps prove quite difficult for many boys and men who don't have a trusted person to help guide them through the process.

## **Considerations for Young Americans**

Brooke Weingarden, DO, MPH, a psychiatrist who specializes in child and adolescent psychiatry, provided insight into the impact the pandemic has had on her practice and that of colleagues. She painted a picture of overwhelming need that reflects what is being seen across the United States and in most other countries, and reflected the perspectives of panel members. She noted that physicians, in particular psychiatrists, are seeing a lot of worry and concern in every economic stratus. Although many individuals are comfortable with their incomes and work situations, for many others, incomes and finances are still a major source of anxiety, fear, and worry. It's no wonder that worries about finances have long been one of the main sources of interpersonal conflict, even in the best of economic and social circumstances.

Even those who are financially okay may not feel secure, given everything that's happening around them and widespread uncertainty about how the pandemic may progress. This drives concern and makes normal levels of anxiety about finances even worse. That, in turn, may perpetuate additional interpersonal conflicts at home and in the workplace. In the latter environment, conflicts and worry can often translate into poor job performance, which itself can turn into a worrisome work environment. Combined with the widespread isolation and loneliness people are already experiencing, these financial stressors (real or imagined) are having a significantly adverse impact on people's emotional wellness and outlook.

"I deal with children who live in two different worlds, and my experience in dealing with their emotional needs is different," said Weingarden. "On the one hand, I deal with lots of children who are in foster homes. While these children, boys and girls, certainly have challenges, and some are really struggling, many of my patients in foster homes are doing very, very well emotionally utilizing telehealth. Some are doing better

than those I see in my private practice who are decompensating in many ways. I am not sure what the reasons for this may be, and certainly this is an area for more research, but it may be that these children have more structure, have someone watching over them and helping them fulfill their educational and medical obligations and are by in large away from some of the traumas that are damaging to so many children in my private practice. It is also interesting that the levels of living disruptions and isolation for the children I work with in residential foster homes is less than for many of my private-practice patients who are in their own homes. In residential facilities, they're set up to create structure, in private homes there's often a lot of disruption to family life and economic life because of COVID-19, " said Dr. Weingarten.

Similarly, in residential facilities, the children aren't totally isolated from other children in that facility and can engage in physical activity with peers. Most of the children in my private practice don't have that social interaction." Clearly, Dr. Weingarten's experience speaks to the larger issue of the need to look at unique ways to deliver care and to be more creative during COVID-19.

## "I have been in practice for many years, and I have never seen so much crisis at the breaking point as I see now."

Brooke Weingarden, DO, MPH

The magnitude of COVID's impact on children is reflected in the number of mental health treatment claims for children. A recent report by FAIR Health showed a dramatic increase of 94% in claims for generalized anxiety disorder and an 84 - 90% increase, for major depressive and adjustment disorders in April 2020 for children aged 13 - 18.<sup>28</sup> This analysis also found dramatic increases in these mental health categories for young adults 19 - 22 years of age. Equally distressing is that during the period of January to November 2020, there were increases in claims related to self-harm and substance abuse disorders in these cohorts. The authors found that the increases were directly related to economic instability as well as infection-related fears, bereavement, and social isolation. The latter category included loss of large group interactions, such as would occur in churches, parties, social organizations, and sporting events as well as important milestonestone activities such as graduation, college visits, and proms.

People in all social, economic, and demographic categories are struggling more—and in more ways—than ever before. We're all used to stressful situations cropping up from time to time in our home, family, personal, and professional lives. And most of us are also used to being able to manage those stressors. But

<sup>&</sup>lt;sup>28</sup> FAIR Health. (2021, March 02). Impact of Covid-19 on Pediatric Mental Health: A Study of Private Health Care Claims. <u>https://www.fairhealth.org/</u>

during COVID-19, a lot of people are being bombarded my by multiple challenges coming in from different facets of their lives, all at the same time. To make matters worse, add in a general feeling of uncertainty and government-mandated isolation from friends and colleagues. It's no wonder that many mental health professionals say that the stress levels they're seeing are higher than at any point in modern history. Weingarden said that working with her patients before the pandemic hit was like putting out occasional small but sometimes intense fires here and there. During the pandemic, however, she feels like she's trying to put out a massive forest fire with a squirt gun. It's a situation that's frustrating for both patients and the health care professionals who treat them.

Mental health challenges from COVID-19 have permeated all segments of our society to the extent that we need to let people know that, given what's going on around them, their feelings and psychological responses are completely appropriate and normal. That basic message needs to become a standard part of helping patients deal with a pandemic. The next step, providing resources to help people work through these issues, is also extremely important.

Weingarden noted that while children are a primary focus of her practice, the economic tensions experienced by the adults in their lives impact the family as a whole. So while children are not usually involved in day-to-day family finances, they're masters of picking up their parents or caretakers' emotions. As a result, the children (who spend a great deal of time asking themselves "how is this going to affect me?") end up overwhelmed by their own feelings of worry, uncertainty, anxiety, and depression. Children who are under psychiatric care, who lived chaotic or traumatic lives, or even had ADHD or other special needs are especially susceptible to these layers of sociologic and psychiatric stress. The isolation and loneliness experienced by an entire generation of children who have spent as much as a year away from their classmates serves only to make these difficult emotional times even more challenging.

Judy Seals-Togbo of Men's Health Network in Tennessee, who works through her church, deals with poor, rural Black populations and sees even grimmer scenarios playing out in her communities. There are many young boys who are at home with family members (parents and, sometimes, older siblings) who have not been able to work. As a result, many of these young boys don't go to school. "These young men, and women have lost at least a year and a half worth of education and are in a home situation with men who are undereducated and, for the most part, have already lost their lives," said Seals-Togbo. "This is very sad. There are also reports that many other children in similar situations don't engage in meaningful remote education even if they have reliable computers or networks or are allowed adequate time to use these systems in their homes."

As discussed above, most of us experience occasional stressful situations and come out of them just fine. But people can't be in crisis mode all the time. There's no question that many people have legitimate reasons to worry, which we've discussed throughout this monograph. However, as Giorgianni notes, the constant drone by traditional and social media about financial downturns, insecurity, and devastationmuch of which is not grounded in fact—overplays the stories of economic gloom and uncertainty and underplays encouraging stories. That 24-hour-a-day diet of negativity amplifies people's already high levels of worry and anxiety.

The panel discussed the relationship between the emotional and physical traumas felt by younger persons now and the potential for these stresses to have lifelong impacts on their outlook on life and determinants of health, particularly those related to emotional wellness. Elizabeth Ball, Director of Clinical Services for Integrative Health Centers in Nashville, Tenn., brought up the important link that has already been established in this process. The CDC-Kaiser Permanente Adverse Childhood Experiences (ACEs) study looked at the downstream impact of adverse childhood experiences in 17,000 children, and provides clear and validated information about the correlation between childhood experiences and long term health status, determinants of health, and risk.<sup>29</sup> *It is notable that this landmark study used questionnaires that were gender specific to insure relevance to the survey populations.* 

The emotional traumas of COVID-19 are, by definition, significant ACEs and will most likely have a pronounced impact on later life determinates of health and health outcomes, including heart disease, asthma, cancer and overall quality of life. ACEs must be recognized by primary care providers as an important component of ongoing health care of these individuals throughout the lifespan. Much more work needs to be done to examine the unique health implications of COVID-19 on this generation of children, and there is also a need to develop appropriate approaches to managing their care. We need to be prepared to deal with these challenges for at least the next decade or longer. Similarly, these physical conditions and the lasting mental, financial, and educational impacts of the entirety of COVID-19 will likely lead to a need for long-term care of the mental-health issues that we are just beginning to see in clinical settings now. Ball also expects that, as a result of the pandemic, vulnerable populations will only get bigger, which will place additional extraordinary demand on already thinly stretched primary health care, mental-health care, and social safety-net systems.

# **Considerations for Older Americans**

Thair Phillips, President and CEO of RetireSafe, provided comments about the situation many senior-age men face. While it may be a bit of a simplification, he noted that there are two broad groups of older Americans that we need to consider as we look at the impacts of COVID-19. On the one hand are those who are fairly financially stable and will likely continue to be so as financial markets and real estate continue to do well. These folks are generally healthy and have no significant health issues. Yes, they have more than the usual amount of pressure brought on by mitigation requirements but for the most part,

<sup>&</sup>lt;sup>29</sup> Felitti, V.J., Anda, R.F., Nordenberg, D., et al. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, *14*(4), 245-258. DOI: https://doi.org/10.1016/S0749-3797(98)00017-8

these people have developed coping mechanisms and alternatives to how they would normally be living their lives. "I don't mean to suggest that there is not an increase in anxiety, depression, worry, and in some cases fear that needs management," says Phillips. "But these have not, in many cases, risen to the level of crisis. Similarly, because these folks generally have stable medical conditions, the concern about accessing health care and the potential long-term impact of deferring medical visits for what would be an inappropriately long period of time under normal circumstances may be real but not yet at crisis. Hopefully, as vaccinations begin to have their impact and begin to open up safe living for seniors, who in most locals are eligible for vaccination early on in the process, they will be able to pick up where they left off in the essentials of life."

Gregory Pecchia, DO, who is a staff geriatrician and the Sr. Director; Academic Innovation and Telehealth, Western University of Health Sciences, provided an additional perspective. He agreed—to a point. His practice is in a fairly well-off community. So, financial pressures are not as dire as they are in some other communities. "That said, many of the patients in my community can hold up as long as the markets hold up," Pecchia said. "If the current markets turn down or go through a major correction, it will make a financial difference in most any group of patients who are highly tied to markets. In that case, we'll see these folks who have been riding it out without too much concern start to feel squeezed. If that happens, folks who've been taking good medical care of themselves and keeping up their care, including behavioral health issues, even through virtual visits, will likely have another firewall to good care put in front of them and that is cost for copays. I think this would particularly adversely impact men who, generally speaking, don't need too many reasons to put off health care."

On the opposite end of the spectrum, we have a significant number of older Americans who, prior to COVID-19, already struggled with isolation, poor health, and poorly controlled or chronic medical conditions and, in many cases, unstable finances. In addition, there are approximately 2.6 million (about 6% of the US population) living in assisted living or group facilities (or who should be in such a facility).<sup>30</sup>

<sup>&</sup>lt;sup>30</sup> Institute of Medicine (US) Food Forum. (2010). *Providing Healthy and Safe Foods as We Age: Workshop Summary*. Washington (DC): National Academies Press (US).

These seniors are not fairing as well medically, emotionally, and for many, financially. Until recently, older Americans were able (and willing) to welcome their adult children (and sometimes grandchildren) back into their homes when economic conditions caused loss of employment and economic uncertainty. With

How to balance the desire to help their adult children who are suffering economically with the need to ensure medical safety for everyone--but especially the older Americans, who are more susceptible to severe COVID symptoms and death. This unpleasant situation contributes to the increase in mental-health issues that we've been seeing. COVID-19, things are very different. Although many seniors are less impacted by current economic downturns than their children, and are, therefore, in a position to help family members, having people of multiple generations living in one household appears to be a potential predisposing factor to spreading the virus. This creates a very difficult situation for seniors and their dependents. How to balance the desire to help their adult children who are suffering economically with the need to ensure medical safety for everyone--but especially the older Americans, who are more susceptible to severe COVID symptoms and death. This unpleasant situation contributes to the increase in mentalhealth issues that we've been seeing.

Alfonso Gibbs, who is a licensed clinical social worker at the Veteran's Administration Health Systems of Southern Nevada, provides services to military veterans, many of whom are older males. He pointed out that veterans—young or old—

generally do have access to resources, such as service-connected benefits, that are not available to the general public. And those who take advantage of those services fare better than a similar cohort of non-veterans. That said, there is a significant subset of veterans who, prior to this pandemic, had a myriad of economic, substance abuse, and other serious health concerns, including paralysis, and service-related post traumatic stress disorder that now have been added to by the additional health and psychiatric burdens of COVID-19. While many military Veterans, and their family members are successfully dealing with the stresses of the pandemic, this latter group is experiencing enormous challenges to their physical and emotional health—a situation that will likely continue into the future.

The VA, along with the rest of the medical community, is trying to better understand the complexity of these future challenges but, as most on the panel have noted, the 2019 pandemic has moved through many unchartered areas.

## Impacts on Minority and Vulnerable Populations

Many in America's racial and ethnic minority communities have been hit especially hard—physically, emotionally, and economically—by COVID-19. Large segments of minority communities have had to deal with business closures and essential service cutbacks, which have had the effect of reducing some families and individuals to living near or below poverty levels. In addition, long-standing and well recognized inequities in the social determinants of health have impaired these members of our society from having fair opportunities for economic, physical, and emotional health. The Center for Disease Control and Prevention (CDC) has identified four major factors that contribute to this increased risk from COVID-19 among racial and ethnic minorities.31

## Discrimination

Discrimination, which includes racism, can lead to chronic and toxic stress and shapes social and economic factors that put some people from racial and ethnic minority groups at increased risk for COVID-19.

## Healthcare access and utilization

People from some minority groups are more likely to be uninsured or underinsured than non-Hispanic whites. Healthcare access can also be limited for these groups by many other factors, such as lack of transportation, childcare, or inability to take time off from work. Other factors that affect access include communication and language barriers, cultural differences between patients and providers, and, historical and current discrimination in healthcare. Some people from racial and ethnic minority groups may hesitate to seek care because they distrust the government and healthcare systems responsible for inequities in treatment, and historical events such as the U.S.-government-run Tuskegee Study.

## Occupation

Some racial and ethnic minority groups are disproportionately represented in essential work settings (e.g., healthcare facilities, farms, factories, grocery stores, and public transportation) that increase their chances of exposure to the virus. The majority of these jobs can't be done remotely.

## Educational, income and wealth gaps

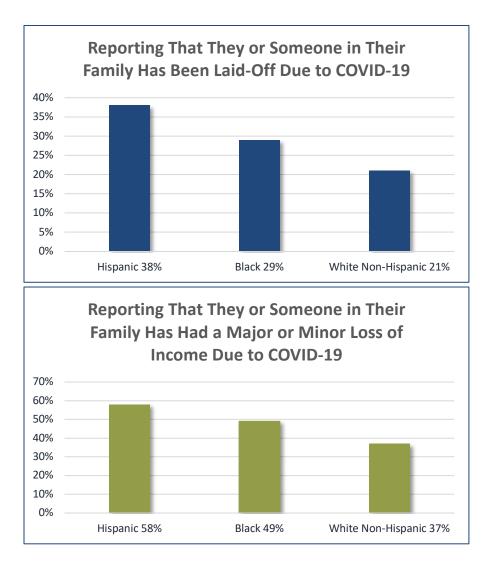
Inequities in access to high-quality education may limit future employment and lead to lower-paying or less-stable jobs and decreased job mobility, all of which make employment during the pandemic problematic and drive myriad downstream physical and economic difficulties. People with limited job options likely have less flexibility to leave jobs that may put them at a higher risk of exposure to COVID-19. People in these situations may have marginal incomes and are highly susceptible to even small and shortlived economic downturns and are devastated by severe and long-lasting downturns, such as we're seeing now.

## Housing

<sup>&</sup>lt;sup>31</sup> Centers for Disease Control and Prevention. (2021, February 12). Health Equity Considerations & Ethnic Minority Groups. HOMECOVID-19. <u>https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html</u>

Many public health officials believe that overcrowded living conditions are one of the major contributing factors to the spread of the virus. Such conditions also make it more challenging to follow prevention strategies and undermine government and community mitigation efforts. In some cultures, it's common for family members of many generations to live in the same household. And despite government efforts to limit evictions, growing unemployment rates in minority communities during the pandemic may lead to greater risk of homelessness or of sharing of housing, which, again, increase the risk of contracting and/or spreading COVID-19.

A recent poll of 1,434 adults, conducted by AP-NORC Center for Public Affairs Research between February 25 and March 1, 2021,<sup>32</sup> found that black and Hispanic families have been disproportionately hit by COVID-related economic downturns and job losses.



<sup>&</sup>lt;sup>32</sup> https://apnews.com/article/ap-norc-poll-people-of-color-covid-19-economy-421f0582650c02a42508fb46aa461a7b

The panel discussed some of the unique impacts that the pandemic has had on the daily lives and their financial implications.

Deacon Glenn Chester, who works through his Church Ministry in Washington, DC and is a trusted messenger in his community, pointed out some of the challenges he faces when trying to reach black youth with messages about the pandemic. "The young black male is in a very bad situation in general, including economically, and this has been made even worse with the pandemic," Chester said. "Even before this crisis, they were overwhelmed by everyday basic things and just trying to survive. So when we talk with them about COVID-19 or other things related to the pandemic and mitigation or even vaccinations, they just don't want to hear it. It's very difficult to get them to focus even on a message such as, 'If you get vaccinated for COVID-19 you might just save your grandfather.' It just doesn't get through." For many of these youth, the few opportunities for employment that they may have had have, by and large, been shut down by the pandemic. This increases frustration and makes it even harder to get them to focus on being active in protecting themselves or their families.

Weingarden commented on one of the potentially difficult impacts of school closings on future employability. One of the upcoming issues new workforce participants at every level will have is their ability to join the workforce. To one extent or another this will impact those coming out of high school, as well as those coming out of college. With the economic reconfigurations of workplace, it is going to be increasingly challenging in the short term for new graduates to find work and increasingly challenging for businesses to help new employees grow and mature in their jobs. Not being able to address these entry-level workplace challenges is one of the nuanced implications and impacts of COVID-19. Giorgianni speculated that these challenges will become even more difficult for those who have not been able to finish high-school, which may be a significantly higher percentage of young men than usual in the three-year period immediately following when the pandemic is declared to be under control. Several on the panel expressed concerns that an entire generation of youth will be at a lower academic performance level because of the impact the pandemic on education.

Stephen Petty, President and CEO, Lynn Institute For Health Care Research, Inc., and former chair of the American Public Health Association Caucus on Men's Health, spoke about the importance of reaching into all types of communities in general to reach boys and men with important health messages and advocacy.

"Meeting people where they live, work, play, and pray, and meeting with them with trusted messengers and champions from their community are two of the most important reasons we and colleagues such as MHN have had the successes we have had in health care outreach and education. Working in the faith-based community settings is also an important and effective way to address concerns through faith-based champions and trusted messengers. These are very powerful allies in helping to address much of the adverse impacts of COVID-19 at the all-important community level."

Brott noted that part of the challenge in reaching many minority youth, particularly in at-risk neighborhoods, is not just to communicate intergenerational messages about the pandemic but to help those trusted messengers charged with bringing messages and education to certain communities learn how to do so effectively with all the fundamental survival needs of black youth and others who are just worried about surviving.

Courtney Clyatt, MPH, Senior Program Officer for Engagement at the Patient-Centered Outcomes Research Institute (PCORI), provided additional insight into some of the challenges faced with vaccination initiatives in some communities of color. "Some of the challenges in vaccine hesitancy are rooted in the real, historical concerns many in the AA community have with medical research and care, which has in some instances been harmful to the AA community," she said. "It is so important to have trusted messengers in the community to help educate and bring important information to the community about COVID-19 and other health needs."

"The young black male is in a very bad situation in general, including economically, and this has been made even worse with the pandemic. Even before this crisis, they were overwhelmed by everyday basic things and just trying to survive. So when we talk with them about COVID-19 or other things related to the pandemic and mitigation or even vaccinations, they just don't want to hear it. It's very difficult to get them to focus even on a message such as, 'If you get vaccinated for COVID-19 you might just save your grandfather.' It just doesn't get through."

**Deacon Glenn Chester** 

Trusted messengers can be of great service to their communities as explainers of science. A lot of people are understandably confused by the constantly changing advice and perspectives of "experts" and talking heads in the media. That confusion often leads them to distrust not only the "experts," but the system—and science—as a whole. The general public doesn't appreciate that science is constantly learning and evolving. Most non-scientists just want the answer: clear guidance and clear instructions on what to do. A community's trusted messengers (provided they're properly educated) can address this confusion and mistrust by explaining the most current knowledge and strategies and helping people understand why things have changed.

Many of the economics-related psychological impacts of the pandemic will have a disproportionate effect on the most vulnerable populations, particularly in minority and, LGBTQ+ communities and in rural settings. Rural communities, which are historically greatly underserved in virtually all areas of health care, have experienced some unique challenges because of COVID-19. For example, much of the messaging about overall health and wellness—and now about COVID-19—that rural communities receive isn't effective, as evidenced by the general health status and morbidities levels in these areas. This may be because existing communications approaches don't resonate with this population. Public health agencies must conduct comparative effectiveness assessments of health and wellness messaging and approaches to determine what works best in rural communities. This is especially true when trying to target boys and men within rural demographics, as most health-related messaging is designed to appeal to and motivate women and girls, which has the unfortunate effect of alienating boys and men.

In addition to creating and fine-tuning messaging, as we hopefully move forward into the recovery phase of the pandemic, in 2021 and 2022 we need to do a systematic assessment of the overall public health and behavioral health services that are available in rural areas relative to urban areas. We then need to create mechanisms to augment underfunded public health infrastructure in these areas that will enable us to better deliver health promotion, disease prevention, and care services to rural areas.

Boyd noted that much could be written about the support dynamics to address medical emergencies in rural communities vs. urban communities vs. inner-city communities. For example, primary and secondary controls in rural communities may be stronger than those in urban communities, necessitating a different avenue for influencing behaviors. In rural communities, one often finds family, both immediate and extended, living within a short distance of each other, and church-going and other activities where one interacts with neighbors and fellow employees. In urban/suburban areas, one is surrounded by "strangers" (who one often refers to as "friends" but who may have little influence on an individual's decision and response to health or other crisis).

Ball noted that many people living in rural communities continue to have a fair amount of trust in the medical community. But there are still some who have a general distrust of physicians and other providers. Those people are the most difficult to convince to see a provider for a physical ailment or a regular check-

up, let alone to go in for a mental-health-related condition. One of the keys to moving forward is to focus more on an integrated-care relationship with health providers, this is particularly useful in rural communities as it helps build and strengthen trusting relationships and also makes it easier and more seamless to the patient to integrate mental health services into ongoing care. Taking a look at ways to develop and broaden integrated care models and assessing their role in managing medical emergencies such as COVID-19 would be very useful research and planning work.

In rural communities, it's not uncommon to have very few employment opportunities and very limited financial resources. Ball noted that there are many in rural communities who all of a sudden have had their long-standing career ripped out from under them or have seen the shut-down of an entire industry sector that a local community depends on. These folks will have to figure out how to completely rebuild their careers, most likely in a brand-new line of work. While some may not have to start from scratch many will have to rebuild almost completely. Because of the limited opportunities in these rural communities, it places a tremendous stress on these individuals not only in terms of rebuilding their careers but decisions that may require leaving family and community under difficult circumstances.

Rural communities also have issues with substance abuse, and this longstanding problem has been exacerbated by COVID-19. Significant numbers of people in these communities were already living on the precipice of personal, economic disaster, barely hanging on. Then COVID-19 came along and completely destabilized them; their physical and mental health quickly deteriorated. These problems cause a huge ripple effect in families and on the entire community, particularly in the context of limited job opportunities. These ripples are showing up in

increased rates of domestic violence, child abuse, and substance abuse. Getting mental-health services in rural communities was tough before the pandemic hit—and it's been nearly impossible since. "The It's absolutely essential that we review how to deliver health care and related services to rural communities during times of public health emergencies.

It's absolutely essential that we review how to deliver health care and related services to rural communities during times of public health emergencies. Actually, this is just as true in urban communities where physical- and mental-health services are inadequate. If those services can't accommodate current needs, how could they possibly function when those needs are magnified by unemployment, a variety of mental-

health challenges, and poor coping strategies? We cannot deal with an unexpected and very difficult public health disaster with the same tools, resources, and approaches that we use in the normal day-to-day work.

Pandemics have historically had a disproportionately large impact on American Indian (AI) and Alaskan Native (AN) communities. Epidemiologic data from the H1N1 influenza shows that mortality rates for these peoples were four-times higher than in the general population. Similar grim statistics were seen in the 1918 Spanish Flu. The period between January and June 2020, showed that AI/AN morbidity rates from COVID-19 were are 3.5 times higher than for non-Hispanic whites, and mortality rates were almost twice as high. COVID-19 has killed scores of tribal elders and cultural custodians, damaging the overall ability of these peoples to engage in many of their rich and important traditions. The impact has not just been in morbidity and mortality, AI/AN communities have also been heavily impacted by COVID-19 with a unique set of issues related to culture, their own sovereign regulation on obtaining care, and in the the financial downturns which have hurt many AI/AN enterprises. The physical impact on AI/AN is staggering.<sup>33</sup> The reasons for this significant damage are many but central to these are the years of neglect of NA/AN health issues, limited tribal resources and discrimination towards these Native peoples.

<sup>&</sup>lt;sup>33</sup> Burki, T. (2021). COVID-19 among American Indians and Alaska Natives. *The Lancet: Infectious Diseases*, 21(3), 325-326. DOI: <u>https://doi.org/10.1016/S1473-3099(21)00083-9</u>

# COVID-19 Vaccine Hesitancy: A Potential Confounding Factor

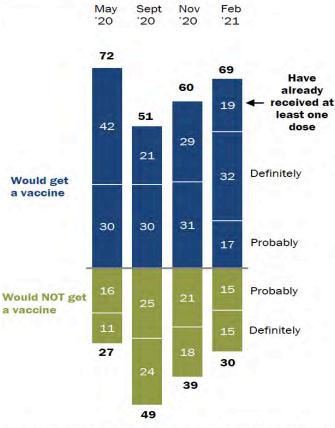
While a comprehensive review of vaccination against COVID-19 is beyond the scope of this document, there are some important perspectives about vaccination that have a bearing on the economy and stress levels of Americans.

The decision to be vaccinated against COVID-19 has, unfortunately become a stressful event. While vaccines in the United States are being administered at no cost thanks to an important determination by the Trump administration in mid-2020 to pay for all vaccines and their administration fees. According to a March 2021 poll by The Pew Research Center, the majority of Americans (76%) believe that in order to overcome the economic impacts of the pandemic, vaccination of the majority to reach populationimmunity levels is essential.<sup>34</sup>

Yet, despite this view, there is still a great deal of skepticism about the need, effectiveness, and short/long-term impacts of being vaccinated. As late as March 2021, some 39% of Americans (Graphic 11) were not inclined to be vaccinated. This includes a stunning 30 percent of active-duty military personnel, 39 percent of Black Americans, and almost 20 percent of general workforce health care Americans and COVID-19 Vaccines - March 2021<sup>34</sup>

# Half of Americans intend to get a COVID-19 vaccine; 19% already have

% of U.S. adults who say, thinking about vaccines to prevent COVID-19, they ...



Note: Respondents who did not give an answer are not shown. Survey conducted Feb. 16-21, 2021. "Growing Share of Americans Say They Plan To Get a COVID-19 Vaccine – or Already Have"

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personnel (rising to 40 percent in Los Angeles and a startling 60 percent of nursing home workers in Ohio).<sup>35</sup> Overall, contrary to general trends in health care access, 72 percent of males and only 66 percent of females have been or are willing to be vaccinated.

<sup>&</sup>lt;sup>34</sup> Funk, C., Tyson, A. (2021). *Growing Share of Americans Say They Plan to Get a COVID-19 Vaccine – or Already Have*. Pew Research Center: Science and Society. <u>https://www.pewresearch.org/science/2021/03/05/growing-share-of-americans-say-they-plan-to-get-a-covid-19-vaccine-or-already-have/</u>)

<sup>&</sup>lt;sup>35</sup> Zitser, J., Ankel, S. (2021). Here's Why a Surprising Number of Healthcare Workers are Rejecting COVID-19 Vaccine Despite Having Witnessed the Immense Suffering of the Pandemic. Insider. https://www.businessinsider.com/covid-19-heres-why-healthcare-workers-are-turning-downthe-vaccines-2021-2

Many businesses are struggling to find the balance between the positive effects that vaccinating their employees will have on the company's economic wellbeing and operational safety, and the concerns and anxiety that some employees, particularly females, have about being vaccinated. Some industries, for example cruise lines, have already concluded that vaccinating their crews is necessary to resume operations; many other companies are providing financial or other incentives to personnel to get vaccinated. Among those who are most distressed and distrustful of the vaccine, and those who feel that vaccines just aren't not necessary, getting vaccinated may be linked to their ability to return to work, travel, and engage in other activities. This is especially true if the U.S. (or individual states or localities) adopt "vaccination passports."

Carlos Blanco, CEO and president of The Lynn Health Sciences Institute, brought up the issue of COVID-19 vaccinations as the most important way to get control over the pandemic and a precursor to addressing the broad health and economic problems we face. As with many others in health care leadership roles, he is very concerned with vaccine hesitancy. "At our research center," he recounted, "we have conducted many trials on all of the vaccine candidates. Unfortunately, what we're seeing is a huge amount of vaccine hesitancy based on misinformation and misunderstandings about the rigors of these trials and the quality of the data being generated from these massive global studies. This is, of course, very worrisome. If we do not get to large segments of the population quickly and bring vaccination rates up to the critical numbers needed to get to so-called herd immunity, we will have a very difficult time, not only controlling the pandemic's continued spread, morbidity, and mortality, but it will prolong and spread financial difficulties to other sectors of the economy." Lags in reaching effective population immunity are also likely to contribute to the rise of additional viral mutations, some of which could be highly problematic. In addition, if we are not able to return to some level of interpersonal and economic normalcy for another year or two or more, the potential impact on mental health and wellbeing will be catastrophic.

In the VA system, Gibbs noted, "we utilize peer-to-peer groups, such as those who have mental-health diagnoses and people who are essentially homeless, and they help us very effectively reach and work with peers who are in need of care in these areas. These peer-to-peer groups may be very useful in helping to bring people in to be vaccinated, not just in the VA setting, but also in the general population." One key point to explore is how to better use peer-to-peer programs to reach out for important public health emergencies and, given the ongoing challenge of vaccine hesitancy, use this as a tool to bring reluctant peers into vaccination centers. This may be particularly effective in minority communities.

Stressing the role of trusted messengers, Gibbs pointed out that there is a cohort of individuals who are respected in their communities that has yet to be tapped to help address pandemic issues, particularly continued mitigation and vaccination. Minority persons retired from the health care system such as physicians, pharmacists, nurses and pharmaceutical reps could be a rich resource to help in this pandemic, and for other future health emergencies. These individuals already have a lot of trust in their communities and could be very influential in bringing minorities to care and vaccinations. Another important way community trusted messengers can be utilized is to explain to people the nature of science. What is confusing people and causing them to not trust how we approach the pandemic is the constant changing of perspectives. Unfortunately, but quite understandably the general public does not appreciate that science is in a constant state of learning and evolving.

Clyatt spoke about a generalized problem in communicating with non-scientists about the evolution of

One of the most important ways to address this confusion and mistrust is to utilize trusted messengers within the community to help people not just know what the most current knowledge and guidance is but also to understand the reasons it has evolved and may have changed as the process of science advances. scientific thought proceeds. What the public is seeing, virtually in real-time because of electronic media, is how the science is evolving and how knowledge about solutions is developed; this is unique. So as the science plays out in public the discourse and expert opinions on how best to deal with COVID-19 shifts and changes. This is not only confusing people but also feeding into the mistrust that they have in medical sciences and eroding confidence in the process. One of the most important ways to address this confusion and mistrust is to utilize trusted messengers within the community to help people not just know what the most current knowledge and guidance is but also to understand the reasons it has evolved and may have changed as the process of science advances.

Winegarden agrees that we have a tremendous amount of human capitol in retired people from the health care space, and using them and their expertise and relationships within their respective communities is an idea well worth considering. Not just for the issues we face with COVID-19, but also for the broader based issue of engaging them in better health care.

## Impact on the Medical Business Sector

Government-mandated lockdowns have had a tremendous impact on small and medium sized business and their employees. But while there is much discussion of those economic impacts on restaurants and other service-sector businesses, we often forget how the health care sector has been impacted. The combination of mandatory lockdowns and the public's fear of contracting COVID-19 in a health care setting caused many hospitals, medical-, dental-, and related professional providers (such as physical therapy and mental health services) to either close or to limit their hours, capacity, and/or types of services they could offer. As a result, patients and clients found it difficult or impossible to schedule office visits and many had to cancel elective or non-urgent medical procedures. Many others curtailed or completely stopped treatments for chronic conditions. The fear factor that has impacted most every small business has also impacted primary care at a time when those services are needed most.

This created revenue shortfalls and financial pressures that led many hospitals, clinics, and private practices to close outpatient facilities and to trim services (and personnel) in areas as diverse as neurosurgery and orthopedics.<sup>36</sup> This was in part to comply with delaying non-essential health care services and to prioritize COVID-19 related services. The Physicians' Foundation has estimated that some 8 percent of all private medical practices have shuttered due to COVID-19, including many primary care practices.<sup>37</sup> This will most certainly further compromise an already under-resourced primary care system. Several on the panel believed that such widespread and long-lasting constraints on health care services is unique to the COVID-19 pandemic.

In dentistry, almost all practices shut down for at least several months, either voluntarily or by government order. Many of these practices will not survive.<sup>38</sup> Businesses revenues have also been adversely impacted in clinical laboratory and radiology centers. Chiropractic, podiatric and physical therapy services providers as well as those providing services such as speech, occupational and psychological support services have also suffered revenue losses. Some of these providers have been able to weather the storm and will gradually be able to bring back patient traffic back into their businesses. Others have already closed permanently or will not be able to rebuild.

Health care providers are not immune to the psychological traumas that this type of severe and widespread economic downturn cause. These closures of small generally independent owned businesses have added to the financial stress of their owners as well as the emotional stress on them and their

<sup>&</sup>lt;sup>36</sup> American Hospital Association. (2020, May). *Hospitals and Health Systems Face Unprecedented Financial Pressures Due to COVID-19*. Retrieved January 2021, from <a href="https://www.aha.org/guidesreports/2020-05-05-hospitals-and-health-systems-face-unprecedented-financial-pressures-due">https://www.aha.org/guidesreports/2020-05-05-hospitals-and-health-systems-face-unprecedented-financial-pressures-due</a> <sup>37</sup> Physicians Foundation. (2020, August 18). *The Physicians Foundation 2020 Physician Survey: Part 1*. Retrieved January 2021, from <a href="https://physiciansfoundation.org/">https://physiciansfoundation.org/</a> (2020, August 18). *The Physicians Foundation 2020 Physician Survey: Part 1*. Retrieved January 2021, from <a href="https://physiciansfoundation.org/">https://physiciansfoundation.org/</a> (2020, August 18). *The Physicians Foundation 2020 Physician Survey: Part 1*. Retrieved January 2021, from <a href="https://physiciansfoundation.org/">https://physiciansfoundation.org/</a>

<sup>&</sup>lt;sup>38</sup> Brian, Z., Weintraub, J.A. (2020). Oral Health and COVID-19: Increasing the Need for Prevention and Access. *Chronic Dis.,* 17, 200-266. http://dx.doi.org/10.5888/pcd17.200266

families. At the same time, many providers are also empathetically impacted by the financial plights and emotional struggles of those they physically care for.

## Interrelationships Between Physical and Mental Health

The panel devoted quite a bit of time to discussing the interrelationship between physical and mental health. Sara Coles, MD, a family physician in Phoenix, Ariz., and chair of the American Academy of Family Physicians Commission on Health of the Public and Science, and John Droughty, DO, founding dean and chief academic officer at Noorda College of Osteopathic Medicine in Provo, Utah, have both seen a significant increase in mental health issues in their practices across all patient demographics.

These issues manifest in a variety of ways, including depression, anxiety, trauma, new physical symptoms and disorders, as well as a significant increase in anxiety resulting from insecurity about food, housing, and employment. These issues have always been part of family practice, but the number of patients presenting now is far greater than before COVID-19. Sadly, the aforementioned loss of primary-care providers and services will make it difficult for patients to resume chronic-care management once the acute phase of COVID-19 is brought under control and patients feel safer about visiting a provider. Telehealth, which we covered extensively in a prior publication in this series, has become a viable alternative to in-office visits for many conditions and situations during COVID-19. Yet, acceptance by providers and patients, and adequate reimbursement issues still present challenges to broader adoption of this technology. This is why the panel felt that it will be important to conduct research into the effectiveness of telemedicine as a way of augmenting primary care (and to some extent specialist care) as a way to bring patients back into care for both chronic and newly evolving conditions that were not adequately addressed because of patients' fear of contracting COVID-19.

In addition, many individuals have become reluctant to seek mental health care because they've either lost their job and/or their insurance, or they simply can't afford it. The lack of parity for coverage of mental health conditions existed before COVID-19, but that problem has become even more acute in an era when we will need to provide mental-health services to individuals suffering from COVID-19 post-traumatic stress disorder and the mental-health aspects of COVID-19 Long-Hauler patients. We therefore need to assess the types of services that can be offered—from traditional, in-person sessions to telepsychiatry and virtual support groups—as well as how to ensure equitable reimbursement for psychiatric, psychologic, and social services. These assessments need to consider the high likelihood that Americans, from school age children to senior citizens, are going to need mental health services.

## The Challenge of Getting Men Back to Medical Care

Coles addressed how her practice (which includes several physicians, NPs PAs and other clinical staff that also serves as a large medical residency training program) addressed the reluctance of patients to engage in office-based care during the pandemic. "When COVID-19 hit, we saw a dramatic drop in patients coming in for regular visits, the drop off was about 60%. We decided that the best way to manage this was to turn to a telehealth format. This was very new to most of us, but we did utilize it."

This gave Coles and her colleagues an opportunity to examine the utility of using telehealth to manage not only physical care but also mental health care. They also started a vulnerable population patient program, which identified patients who had a high potential for contracting COVID-19 and having severe outcomes, or those who had the potential for having adverse outcomes from mitigation measures. That included patients who are economically or physically fragile or who had other problems that would be problematic for them in terms of their overall determinants of health. "We utilized our physician assistant and medical student teams to call each of these patients and do a phone assessment. We then tried to get them telehealth or in-office health appointments, as appropriate." Coles noted that this type of outreach effort is a non-covered service and, under ordinary circumstances, wouldn't have been possible. However, it was only because they had a number of medical students in the practice at the time that it became feasible.

Pecchia noted that getting boys and men into the health care system is and has been a problem for a long time. Nationally, we know that only about 20% of in-office visits are for males. Female patients access health care much more frequently and much earlier on in their disease process. This disparity is one of the many factors that lead to the disproportionately high comorbidities and mortality from COVID-19 in males. To make matters worse, there is some data that suggests that there is an even greater disparity between female and male episodes of care.<sup>39</sup> This is quite problematic in addressing the health of boys and men.

There is a bit of good news though. Preliminary data suggest that there is much greater uptake of telehealth by men than by women. If this holds true, in the years to come it may provide a key to engaging more males in clinical care. Pivoting to this type of 24/7 team-based type of care using new technologies will not come easy for most health institutions though. Men and boys have generally very negative impressions of primary care.

<sup>&</sup>lt;sup>39</sup> Per the Centers for Medicare and Medicaid Services (CMS), "An episode of care ('episode') is defined as the set of services provided to treat a clinical condition or procedure." <u>https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Episode-Costs-and-Medicare-Episode-Grouper</u>

Everything from the appointment-making process, to the waiting room, to the encounter with the provider is generally a turn-off for males particularly in primary care. As a result, males disappear from health care until they get sick. Even then, they tend to come into the system later in the disease process than optimal. This holds not only for physical illness but also for psychiatric illnesses. To be successful in bringing more males into primary care, we need to spend the time to re-engineer what the entire process—before, during, and after the visit looks and feels like to them.

Giorgianni agreed that telehealth fits some of the predispositions and preferences men have expressed about access to health care and that wise use of this technology may be an important new tool in outreach and managing male health care. There are so many factors to consider in this though. It is one part of the care equation to begin managing care remotely. But in many circumstances, lab diagnostics, radiology, physical exams and other hands-on type activities will be needed to make proper diagnosis and direct proper care. and These will "Preliminary data suggest that there is much greater uptake of telehealth by men than by women. If this holds true, in the years to come it may provide a key to engaging more males in clinical care.

not be things that can be done, for the most part, through telehealth. It remains to be seen then how to develop "hybrid" type models of care where telehealth, remote patient monitoring and hands-on diagnostics and care are blended together. This will take a good deal of time, research funding and study. But if it encourages males (and females who also have some resistance to in-office visits) to engage in health care encounters, earlier in the case of a disease and more regularly for chronic care, it is well worth the effort. These new hybridized type approaches, along with assessments of equitable reimbursement for them, are key technologies that should be examined.

Similar to the patient reluctance about going to the emergency room for an acute mental health crisis, there is also fear of going to the emergency room for physical ailments. People are putting off going to care for dangerous, life-threatening conditions such as heart attacks and strokes and this too is quite problematic. Tobago noted that there is a large segment of the population, primarily minority populations and those living in more rural areas of the country, who are not getting the help that they need to get through the pandemic and it is very difficult to find people to bring them to help. This help is not just limited to identifying and treating COVID-19 infections but also helping them manage fragile health. There are many unfortunate situations where elderly persons with long-standing illnesses were afraid to go to the doctor or even afraid for family members or friends to check on them for fear of contracting COVID-19 and simply died at home. These people died because of COVID-19, the fear of COVID-19, not from COVID-19

itself. This obviously has a very dire outcome on the emotional wellbeing of the family and the community at large.

Dougherty believes that because of the disruption of chronic care and the impact COVID-19 is having on many of the determinants of health, particularly in lower socioeconomic groups, we are going to find the already high levels of morbidity of Americans become exacerbated over the next two to five years. It is going to take time to not only re-establish adequate primary care practices but also to address the year-plus lost in controlling so many medical conditions. In certain parts of the country there is an increase in athome births and, again because of fear of contracting COVID-19 during a medical encounter, a decrease in both pre-natal and newborn care. Looking at the impact of these shifts on overall wellness of young children in the first years of life is also an area for research and understanding. These lapses in care may have lifelong implications for some of today's newborns. KEY POINT We are also seeing patients who have had an episode of COVID-19 who continue to have symptoms such as brain-fog and rash for months after the acute infection has resolved. These are the so called COVID-19 long-haulers. These individuals not only are suffering from physical symptoms, but also mental symptoms related to anxiety and depression because of the unexpected long-disease course. He believes one key point for research is to look at the impact these COVID-19 long-haulers (See Graphic Long Haulers) are having on overall determinants of health in areas of the country.

# **Creating Successful Health Outreach to Men and Boys**

Stephen Petty, CEO and president of the Lynn Research Institute, former chair of the American Public Health Association Men's Health Caucus, and a member of the MHN Board of Advisors, has a long history of successfully doing men's health outreach programs. He provided the following practical perspectives:

- When doing any program for boys and men planners need "to get to them where they are physically and mentally."
- Guys think about health care differently than do women, so programs have to be designed to get to the guys from scratch. You can't just take a successful woman's health program and "shade it blue."
- Be intentional in how you construct, market and execute these programs. Have a longer range horizon for measuring success. Your first programs may not be the big draw you were hoping for, but a good goal is to make it a success for the boys and men who are there. Guys like a bit of humor with their health care. They also tend to prefer tie-ins to activity-oriented events.
- We intentionally did things that were a bit off the wall in the health care space but resonated with what guys like to do. That is why we began what ultimately became a wildly successful program called "Pancakes and Prostates," which was basically a staple of men's organizations. This was a pancake breakfast where were we distributed information designed by Men's Health Network for men about prostate cancer and disease and signed up men of age for prostate screenings.

- Other successful venues we and others have used are antique car shows, concerts, bar-b-ques, and car speedways. Bring men into a fun environment and then make important health messaging and screening available to them.
- Be consistent. Do your programs repeatedly. This will naturally create them as events to look forward to and it will not only build attendance but also build a sense of community as the same people are there over and over again and then a sense of trust will often develop because the folks you see there feel like your buddies.
- Do the programs where guys go. Men don't like to go to hospitals or medical offices for check-ups or events. MHN has done programs at Rotary and business group conventions, in major league and minor league sporting arenas, and at county fairs. Other great places to do programs are barber shops, church groups, and kids' sporting events.

# COVID-19 Long-Hauler Syndrome: Prolonged Impact on Care, Workforce, and Mental Wellness

According to a study published in the The Lancet Psychiatry in April, 2021,

( https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(21)00084-5/fulltext) an estimated 30 percent of patients who have had COVID-19—even a mild case—are showing long-term symptoms, including mental health symptoms. While the percentage may be relatively low, the numbers are large. As of 1Q21, there were more than 30 million COVID cases in the U.S. (and 129 million globally), meaning that as many as nine million Americans could have what is now being referred to as "COVID-19 long-hauler syndrome." It is unknown how having had COVID may affect people's ability to re-enter the workforce. Their symptoms are varied and now manifest in a variety of ways in a variety of organ systems and tissues (see Graphic 12). It is not known how long these symptoms will last, or whether there might be other longer-term impacts.

In addition, as more and more viral variants emerge, which most virologists believe is inevitable, we have no idea how these variants will play out in the short and long term, or how they will impact the economy and our overall stress levels. These variants may well be controlled with current vaccine products or they may need their own unique vaccinations. How contagious and how virulent they are in producing severe symptoms is an open question and is currently being researched. Because the potential exists for COVID-19 to become endemic and circulate though the globe in various forms, we must begin to think about ways to manage it and to mitigate the potential impacts on economics and mental health.

# **Key Action Items**

An important part of the panel's charge was to identify areas of consensus to address the issues identified during the discussion. To set the stage for this important aspect of the program, Clyatt addressed the panel on behalf of PCORI. "Discussion on male mental health as it impacts family health and economics is an important area of interest for PCORI," she said. "How to address the significant impact on women and men mentally, psycho-socially, and physically that is happening during this pandemic are areas of great concern. PCORI is very committed to funding work examining how we address these and other important issues related to COVID-19. This is an important to help better prepare for how we approach the next broad based medical emergency."

At the close of the program, our moderator and panel member, Armin Brott, asked the panel to provide final summary comments, observations, and/or important areas to consider in addressing the issues at hand. The following is a summary of panel members' comments:

## Carlos Blanco

COVID has highlighted the historical problems in delivering health care to men and boys. So, in a way we know what the issues are and perhaps the most important thing to do is to accelerate the work that we all know needs to be done across the health care delivery system. We also need to look for ways to mobilize limited health care resources much more quickly and broadly than we were able to during COVID-19. So, looking at models of logistics mobilization in areas outside of health care may be an important part of preparing the health care sector for the next viral or bacterial challenge we are faced with.

## Elizabeth Ball, LCSW

There is an important need to understand how to improve relationships within communities to provide better access for mental health services. Primary care providers and others are very important portals for patients to enter into care for mental health services. So, one of the needs is to fund outcomes work looking at integrated health care models in community settings for best practices for mental health management in terms of administration, clinical care, and referrals.

## Armin Brott, MBA

More attention needs to be paid to the physical environment and way health care providers and institutions present themselves to men. I don't believe there has been much done in this area regarding men. Everything from waiting room design, the demeanor of the people behind the desks, and who answer the phones, to follow up visit scheduling and how the encounter is conducted, including wording, body language, and approach by the provider should be looked at and analyzed for optimal approaches that not only bring men to care but put them at ease, and keep continuity of care. Addressing all these factors will play a role in getting us closer to value-based outcomes for boys and men.

We also should not lose the good things that have come out of COVID-19. Just as history teaches us in the aftermath of prior pandemics there are certain good things that come from these very bad episodes in human history. We should not lose these things or stop developing them. For example, telehealth and telepsychiatry have been given a tremendous boost because of COVID-19 and has made access to care much easier for so many people. The Center for Medicare and Medicaid Services (CMS) decision early on in the crisis to reimburse telehealth services more equitably was instrumental in the uptake of this technology. We should not lose that post-COVID-19 but should evaluate it and help it evolve as part of how we offer care. Similarly, in the workplace, there is a realization that complex and important work can be done from home. Few appreciate that Pfizer scientists and executives tasked with developing the mRNA vaccine by-in-large undertook this task working remotely rather than in traditional office settings. So, this can be done and it opens up many avenues for productive work to many who may be homebound. This too should not be lost post-COVID-19.

## Thair Phillips

Assisted living and nursing home facilities are important sectors that frequently have difficulty dealing with emergencies and crisis. COVID-19 is no exception. To avoid some of the disasters that have occurred during COVID-19, from unneeded loss of life, to the damage caused by isolation, loneliness, and lack of interaction with loved ones and friends, we need to do a broad-based review of how to help living facility owners deal with large-scale epidemics and medical emergencies. We need to study what worked in places where residents fared well and what didn't work and provide proper scientifically rigorous guidance on how to be better prepared and manage such situations. We also need to better study telehealth as one of the tools to provide better access and range of mental health services.

## Sara Coles, MD

We need to take a close look at the infrastructure that supports how we deliver medical and mental health care. It's important to being able to deal with not only emergency situations as we see with COVID-19, but also the day-to-day needs of people that can so quickly spin out of control in a situation like a pandemic. The huge shortages of providers in primary care and mental health care need to be addressed. As these workforce personnel issues are examined and addressed, we also need to look at how we recruit practitioners, at all levels, so that the practitioner workforce better mirrors the demographics of our population.

The lack of trust in the medical science, health care and providers by all too many communities in our society needs to be reviewed and addressed. This is an area that has been neglected and we need to address this so that when the next crisis evolves, or when just general good care and wellness is being delivered, we have the trust of our patients and of leaders in diverse communities. Another aspect that merits review and overhaul is the general approach to care. We need to move away from systems that put their emphasis on "volume based" care to systems that emphasis, and reward value based care so we can get the outcomes that we strive to achieve.

## John Dougherty, DO, FACOFP

What sticks in my mind is to take advantage of the "Fauci Effect" and not rely on sports figures and other celebrities for critical health information and messaging. We need to turn health communications back to trusted messengers in the sciences who are good communicators.

The other thing that is of paramount importance is to insure a diverse range of providers. I am very fortunate that at my medical school I have the highest number and broadest range of minority students enrolled in our program than ever before. This is a strong suit for us, one of which I am very proud of. So, we must look for ways to do a better job of letting prospective students across our diverse populations know that it is possible for them to engage in health care and social services programs. To do that we have to change our approach to recruiting. We also need to examine the way we support professional education to make it easier for those who have the intellect and drive to go into these professions but simply to not have the financial wherewithal to do so and don't have support at home to find out how to get financial resources. This will help address, over time, these pipeline issues. This will not happen quickly, at best seven to ten years to make a substantial change.

There are many additional skills, particularly in the area of men's health and minority health that need to be better addressed in professional curricula and post-graduate training. Because academic curricula are mostly driven by the requirements set out by medical and other health professional and specialty boards, residency changes will only come when credentialing bodies begin to incorporate these things into board requirements.

## Alfonso Gibbs, LICSW, LCSW-C

Noted that he is a "unicorn" in his profession because there are too few people who represent the African American male, and males in most minority groups in social services and therapy. This lack has created difficulty in not only giving relevant care to men and boys of color but also resources to be utilized in creating programs and policy in these critical areas.

The systems that are now in place for providing mental health services are not working well. They do not adequately qualitatively or quantitatively meet the needs of the diverse range of people who need care so desperately. They way social and mental health services are structured, delivered, staffed, and the impact of what services we provide to our clients need to be comprehensively reviewed with an eye to meeting 21st century needs of the population and the complexity of society. This review includes how we bring patients and clients to care, recruiting, , and making available adequate numbers of social and mental health professionals, having ethnic and gender diversity of professionals who can meet the expectations of the full range of clients.

## Salvatore J. Giorgianni, Jr., PharmD

Public health infrastructure is a key component to addressing nationwide medical emergencies. It has been under resourced and underappreciated in its importance to not only maintaining healthy lifestyles but also being able to quickly and nimbly address regional level and national level emergencies. Without a robust public health system, medical emergencies will quickly turn into financial and emotional crisis situation. The COVID-19 crisis provides a golden opportunity to review what has worked, what has not worked and how to prepare public health infrastructure for the next time.

We also must review how we disseminate information on key evolving science issues to enlighten and not frighten the public. It is important for the science community to work more closely with communication organizations, both traditional and non-traditional, to help them get the messages across clearly, correctly and with a minimum of confusion. It also behooves the science community to look at multi-tiered, multi-channel methods to reach people in a way that adheres to sound consumer segmentcommunication using Trusted Messengers and scientists.

## Greggory Pecchia, DO, FACOFP

It is important to lower barriers to communication and access for men and boys and to create an evidence-based basis for trust in others in the health care community. So, we need to study ways to deliver man-sized care. Knowledge and approaches that help men find a trusted source to talk with. Training the people who handle phone calls and elements of the patient encounter in how to talk with men is so important. We also should look at "a store front" of health care for men so when they are ready to shop for health care, it can be male friendly.

## Judy Seals-Togbo

We need to find ways and programs to help those African Americans who have a different mindset about mental health and physical health. One of the places to start doing this is to review how we develop educational material and programs, whether in schools or in community centers and organizations designed to help men, particularly minority men. We need to better understand this important topic and reduce the stigma that prevents so many from getting the help they need. One way to effectively do this is to develop and roll out training programs for community-based health care educators who can conduct programs and help establish support networks for men.

## Brook Weingarden, DO, MPH

She agrees about the importance of fostering better working relationships between psychiatrists and therapists and primary care. This is particularly important because most people do not first come to the doctor with a symptom or set of physical symptoms that, when worked up, are the physical manifestations of an underlying mental health issue. Primary care providers are generally important trusted figures for most people, and using this level of trust to help patients in need of mental health services take that first step is very important. There may be some good models of how this is done but providers need to know about these.

We need to look at the impact COVID-19 has had on health care providers, including the mental health picture, and provide support resources for providers. There were few resources for providers who have been hard hit emotionally by COVID-19 and we need to do a better job of supporting them as well as supporting the rest of the population.

## Wayne Winegarden, PhD

We need to learn from the negative things that have come into sharp focus for all in health care and in the public. In many respects we need to realize that if we waved a magic wand and COVID-19 just disappeared, the deficiencies that COVID-19 has brought to light will still be there to tackle.

## Summary of Key Action Items and Research Needs

Two areas of support are income and retraining. These programs have failed because we are too dependent on going through Congress to get special ad hoc legislation and funding that for things are not there at the time of greatest need. The inability to have proper income safety nets for these special circumstances and retraining are key factors in stress and mental health issues that we face. We should be looking at models outside of the U.S. as to how to build such programs so that they can be activated quickly. Not having these, if and when we meet the next pandemic-like catastrophe, will cause so many with COVID-19 traumatic stress disorder to relive a very bad period and, just like re-traumatization of soldiers, will trigger relapses. The other area that needs attention is the health care and health insurance systems. The patient is not necessarily at the center of how we structure health care. We need to rethink how we deliver health care and develop outcome-oriented studies that show how to implement value-based care. is so important. The following are consensus-driven key action items and research needs that the group felt important to recommend: check final count)

- To insure proper targeted economic support for those in need, we need approaches similar to those seen in several European countries that rapidly provide better and more direct financial assistance to individuals and small business without the need for additional, laborious, and lengthy legislation.
- Government mitigation requirements and people's fears about becoming infected led to broadbased cutbacks on health care services: many urgent-but-non-emergency matters were deferred until public health officials felt it was safe to partially reopen facilities, and many people with chronic medical conditions stopped going for regular care. In addition to negatively impacting communities' overall health and welfare, this situation adversely impacted the economics of many small and/or independent health care businesses, leading many—particularly in primary care—to close. Research is needed into the various ways that COVID-19 adversely impacted local level health care providers and services. We then need to develop approaches that allow care to continue during protracted emergencies and assess the outcome of various care options, as well as to determine the support networks that are needed to economically support small and independent health provider businesses.
- There is little information available about the type and magnitude of physical and emotional stress brought on by catastrophic medical emergencies. Therefore, we need to conduct research in various economic sectors, designed to help better understand how physical and emotional stress from circumstances such as a pandemic impact the overall health and wellbeing of various populations. This will help us develop support and health care services than can be deployed in time of emergency.

- Studies to help identify key determinates of resilience and distress are needed to help better plan to support children in the event of another widespread medical emergency such as a pandemic. Unfortunately, there is a shortage of data on how children in various living settings, including traditional, foster, single parent, and non-traditional, are impacted both physically and emotionally by broad-based economic downturns and medical emergencies such as a pandemic.
- Millions of children have lived through the pandemic, and for many, the experience has been traumatic. These pandemic-related events fit the definition established by the CDC and Kaiser Permanente for Adverse Childhood Experiences (ACE). ACEs have been shown to affect later determinants of health. It is essential to research the extent, nature, and consequences of pandemic-related ACEs on children as well as to compare different strategies that are designed to help children manage these ACEs. The products of this research can help guide management of future medical-emergency-related ACEs.
- COVID-19 has forced patients and providers to utilize electronic healthcare services and accept them into the healthcare delivery model. Services such as telemedicine, telepsychiatry, remote data capture, home-based screening tests, and remote-patient support networks will continue to be in use after COVID-19 has been brought under control and are likely to become even more mainstream over time. Yet, there is still little comparative outcomes-oriented research on the utility, acceptability, care quality, and integration with other electronic modalities. As such, short and long-term comparative research projects should be developed now and carried out over the years that these technologies need to mature.
- That physical and emotional wellness and health are interconnected and interdependent has become significantly more apparent during COVID-19. Throughout the pandemic, integrated health services in primary care, which blends physical and psychological provider services, became a rational and logical next step to addressing many of the fundamental deficiencies in the U.S.'s siloed-approach to healthcare. We need to model, establish, and evaluate new models, including integrated physical and mental health services and ever-evolving technologies in a comparative outcomes-oriented manner.
- The lack of parity between reimbursement for physical- and mental healthcare services must be addressed. Without appropriate adjustment of third-party reimbursement for mental health services, either as standalone services or part of an integrated care model, it will be impossible to adequately manage the expected long-term impacts of post-COVID traumatic stress disorders, including the mental impacts of COVID-19 long-haulers. The lack of parity needs to be addressed by both private and public third-party payers in a way that will encourage these services, particularly in primary care.
- Many vulnerable, minority, and rural communities are at continued risk for negative long-term health and economic impacts from COVID-19. We need to develop and evaluate programs and practices to better reach these communities and to address fundamental structural impediments to good health. Programs that have been locally successful in addressing deficiencies in determinants of health in these at-risk populations should be supported for further development and expansion into other communities.
- Vaccine hesitancy is just one symptom in a syndrome of growing distrust of the government, science, and the health care system among people across socioeconomic and demographic boundaries. And COVID-19 brought vaccine hesitancy into the open. Because hesitancy to get

vaccinated isn't limited to the COVID-19 vaccines, it's essential that we conduct broad-based research into the myriad factors that feed that skepticism. It's equally important to conduct comparative research to identify communication, educational, and other important aspects of restoring this trust in health care and science. Finally, for this work to be truly meaningful and useful in producing population-specific and directed mitigation, it needs to be stratified by gender, population, socioeconomic and racial demographics.

- We must better understand the roles of traditional and social media in shaping—and disseminating—public opinion, trust/distrust, and scientific information. This work by its nature must be done as a cooperative joint venture between science and communications leaders and experts. We also need to better identify the best means of communication and most effective approaches to reach and resonate with key stakeholders, whether they be laypeople, medical professionals, scientists, government officials, or anyone else.
- Peer-to-peer groups have been successfully used to help bring patients into care as well as to support them during ongoing chronic care. Developing peer-to-peer programs to address vaccine hesitancy—including models that use trusted messengers and/or retired health professionals from within the community—should be studied for its effectives in supporting large scale vaccination campaigns for all levels of vaccine admiration. Use of such peer-to-peer groups may be particularly effective in minority communities and communities which have significantly fewer health care resources.
- Engaging boys and men in the healthcare system, particularly mental health care, is vital to creating healthy families, communities, and society. As such, we need more effective approaches to community-based outreach to boys and men about health and wellness. It would be extremely useful to develop and field training programs for peer-level Community Men's Health Educators and to evaluate their outcomes in reaching males with critical health messages and motivating them to take positive action.
- It is important to encourage and support adoption of newer technologies such as telehealth and remote data monitoring.to deliver health care.
- It is important to encourage and support development of hybrid approaches to care management, which include multiple platforms such as telehealth, telepsychiatry, remote patient data monitoring, and hands-on diagnostics.
- There is a need to assess the impact of these newer healthcare delivery technologies and approaches in general and particularly with regard to their impact on rural and underserved communities or patients with limited access to in-person medical care for any reason.
- There is a need to assess the overall structure of reimbursement for new technology-enabled approaches to care, with the goal of bringing parity and, where lack of accessible health services is adversely impacting determinants of health or care delivery, reimbursement plans that would encourage utilization of these approaches.
- One important contributor to disparities in health care in minority communities is the lack of physicians and other providers who "look like" their patients. This is also true with regard to the gender of both provider and patient. For example, while minorities are underrepresented in social work, finding a male social worker is nearly impossible. We should conduct a health care workforce assessment for all health professionals. This would help identify gaps and opportunities that arise

due to the ever-changing demographics of our country. To properly implement and assess approaches to rectifying these personnel needs, we also need to examine professional program recruiting approaches, financial assistance models, and career opportunity engagement at the secondary and early college levels.

• Men in the United States experience disproportionately higher rates of morbidity and premature death than females. The reasons for this are complex and include biological, sociological, lifestyle, and health-system related issues. One of the fundamental building blocks for changing health care delivery to make it more aligned with preferences and needs of male patients is to provide a core curricular framework for educating and training health professionals in the specific and unique health issues facing men and boys. A review of training components in the area of comprehensive male health in professional programs should be undertaken to identify opportunities to better train providers in delivering male-specific care. In order to effect such change, professional credentialing organizations need to incorporate male health management more broadly in certification competencies and medical and professional school curricula.

# Appendix I

# **Panel Members**

## **Carlos R. Blanco**

Mr. Blanco was named President and Chief Executive Officer of the Lynn Health Science Institute in November 2020. Blanco joined LHSI in 2002 as a Clinical Coordinator. Since that time, he has ascended the executive team ranks from Director of Training in 2004, Director of Clinical Trials in 2005, Vice President of Operations in 2007, Chief Operating Officer in 2014 and Executive Vice President in 2019.

## Elizabeth Ball, LCSW

Ms. Ball is currently the Director of Clinical Services for Integrative Health Centers located in Nashville, Tenn. In that role, she sees clients virtually of all ages in rural health clinics that have mental health issues or concerns. She also serve as a liaison with other mental health providers within her organization and provide clinical consultation as requested.

## Dr. Jean Bonhomme, MD, MPH

Dr. Bonhomme is Founder of the National Black Men's Health Network and an expert on men's health, minority health, the impact of poor men's health on families. From 2003 to the present, he has served as corporate president and Chairman of the Steering Committee for CHAMPS (Community Health and Men's Promotion Summit), providing free health screenings to economically disadvantaged minority males. Also from 2003 to the present, he has served as staff physician for Toxicology Associates of North Georgia (TANG), a drug treatment facility based in Marietta, Georgia. From 2004 to the present, he has served on the editorial board of the Journal of Men's Health, and from 2006 to the present on the editorial board of the American Journal of Men's Health.

## Jimmy Boyd

Mr. Boyd is a federal and state level policy analyst who is co-founder of the Father's Connection, a unique men's group therapy and support program. His leadership, with a talented team of dedicated professionals, is responsible for the Congressional passage of National Men's Health Week, signed into law by President Bill Clinton in 1994, also known as International Men's Health's Week, which has since been expanded to all of June and is now known as Men's Health Month.

## Armin Brott, MBA, Moderator

Mr. Armin Brott is a skilled media communicator highly sought after as a facilitator, author, lecturer, and authority on men's health, leveraging expertise with multiple media platforms to craft messages that support the health of boys and men. Brott is a pioneer in the field of fatherhood and has been building better fathers for more than a decade. As the author of 10 bestselling books on fatherhood, he's helped millions of men around the world become the fathers they want to be—and that their children need them to be. He is a member and Board Member of the American Public Health Association Caucus on Men's Health.

## **Deacon Glenn Chester**

The desire is strong to make a difference by fortifying minds through spiritual enrichment and lending an ear and assistance where needed. Because we have lost 15 members in our congregation worship isn't what it used to be. Funerals have become a weekly ritual I could do without, but God!!!

## Courtney Clyatt, MA, MPH

Ms. Courtney Clyatt is a Senior Program Officer for Engagement at the Patient-Centered Outcomes Research Institute (PCORI). She comes to PCORI with more than 10 years of experience in public health and project management. In her position, she has played a vital role in the Engagement Awards program and, specifically, the Pipeline to Proposal Awards, which fund community-building and engagement projects.

## Sarah Coles, MD

Sarah Coles, MD, FAAFP, is an Assistant Professor at the University Of Arizona College Of Medicine – Phoenix in the Department of Family, Community, and Preventive Medicine and practices Family Medicine in Phoenix, Ariz. She received her undergraduate degrees in molecular and cellular biology and saxophone performance from the University of Arizona.

## John Dougherty, DO

John Dougherty DO, FACOFP, is Founding Dean and Chief Academic Officer, Noorda College of Osteopathic Medicine and a Certified Physician Leader in Administration. He was selected for and completed a Senior Leadership Development Program, a National Health Policy Fellowship and holds a Certificate in Finance from the University of California, San Diego Rady School of Management. He was voted Family Physician of the Year for Missouri in 2014, named Education Health Care Headliner by VegasInc Magazine in 2018 and was recently selected to serve as a Governor for the Salt Lake Chamber of Commerce.

## Alphonso Gibbs, LICSW, LCSW-C

Licensed Clinical Social Worker currently employed by the Veteran's Administration Health Systems of Southern Nevada, in Mental Health. Significant case-management experience with severely mentally ill, dually-diagnosed, formerly homeless adult men and women, adolescent youth, at-risk youth, and families. Experience at the executive levels of public health departments in Saginaw, Michigan, and Baltimore, Maryland.

## Salvatore J. Giorgianni, Jr. PharmD - Project Lead

Dr. Salvatore (Sal) Giorgianni received his Bachelor and Doctor of Pharmacy degrees from Columbia University in The City Of New York. He has extensive experience in all aspects of the practice of pharmacy and has held faculty appointments at Columbia and Belmont Universities. He has completed a clinical practice residency at Lenox Hill Hospital in New York City. Dr. Giorgianni is an expert in prescription drugs and health policy as well as the impact of media on male perceptions of health and wellness. He is the Senior Science Adviser to Men's Health Network and is a Co-Founder and Chair-Emeritus of the American Public Health Association Caucus on Men's Health. He is President of Griffon Consulting Group, Inc. a health care and industry consulting practice. He is a member of the American Journal of Men's Health professional review panel.

### **Gregory Pecchia, DO, FACOFP**

Gregory A. Pecchia, DO, FACOFP, is a 1983 graduate of Michigan State University College of Osteopathic Medicine and completed his general medicine training at Phoenix General Hospital (now John C. Lincoln Hospital) and is certified in Family and Geriatric Medicine. He is currently employed as a staff geriatrician and Sr. Director; Academic Innovation and Telehealth, Western University of Health Sciences/COMP-CNW (California/Oregon).

## Judy Seals-Togbo

Ms. Seals-Togbo is Director of State Programs, in Tennessee for Men's Health Network.

## **Brooke Weingarden D.O. MPH**

Dr. Brooke Weingarden is a child and adolescent psychiatrist who works with Birmingham Maple Clinic in Troy, Michigan, Oakland County Schools,

and Christ Child House. Her areas of specialization include addiction in adolescents, as well as early childhood evaluations, disruptive behavior disorders, mood disorders, anxiety, thought disorders, and ADHD. She has lectured and presented nationally on adolescent addiction and trending drugs of abuse. She also has extensive experience working with patients who have comorbid substance use disorder mood disorders. Because of the settings in which she practices, including clinics, schools, and more intensive residential settings in the Detroit area, Dr. Weingarden has extensive experience working with patients of racial and ethnic minority backgrounds, as well as low-income populations. Dr. Weingarden also conducts research of the clinical and therapeutic benefits of CBD as a physician affiliate for Hempworx.

## Wayne Winegarden, Ph.D.

Wayne Winegarden, Ph.D., is a Sr. Fellow in Business & Economics, Pacific Research Institute, as well as the Director of PRI's Center for Medical Economics and Innovation.

# Appendix II

## Discussion Guide and Working Agenda for PCORI Conf. Award EAIN 00095

Supplemental COVID19 – ECONOMIC & FINANCIAL SECURITY Considerations on Behavioral Health For Boys and Men Men's Health Network January 8, 2021 12:00PM- 2:30 ET

## Defining the Problem

How do broad scale economic downturns (such as depressions, or industry sector evaporation) impact overall health and behavioral health?

How do public health emergencies in general impact the economic health of populations? Are there other examples of intentional economic holds on the US or global economy due to pandemics? How have past health emergencies, pandemics, or large epidemics impacted economics and financial security of people, esp. in US?

## Impact of COVID19

How has COVID19 impacted U.S. economic situation in general? How has COVID19 impacted the economic health of boys and men? How does this contrast to its impact on girls and women? Are there important clinical distinctions to be made in these areas in special populations such as: Boys and men of color Military and veterans

Blue collar and white collar workers

- New college graduates children
- Older men

## Moving Forward

Principal lessons learned about pandemic economic impact on males in 21st century

What key things need to be done to help address immediate post-acute pandemic economic related mental health care?

What types of outcomes patient focused studies do you think would be helpful?

## Wrap-Up

Last comments by panel Next process and publication steps

# Appendix III

### Suggested Additional Readings

- 1. Alfani, G. and Murphy, T. (2017) 'Plague and Lethal Epidemics in the Pre-Industrial World', *Journal of Economic History* 77, 1, pp. 314–343.
- 2. Alfani, G. and Percoco, M. (2019) 'Plague and Long-Term Development: the Lasting Effects of the 1629-30 Epidemic on the Italian Cities', *Economic History Review* 72, 4, pp. 1175–1201.
- 3. Bambery, Z. Cassell, C.H, Bunnell, R.E., Roy, K., Ahmed, Z., Payne, R.L., Meltzer, M.I.(2018). Impact of a Hypothetical Infectious Disease Outbreak on
- US Exports and Export-Based Jobs. Health Security. 16(1):1–7. doi: 10.1089/hs.2017.0052
- Beaulière A, Touré S, Alexandre PK, Koné K, Pouhé A, Kouadio B, Journy N, Son J, Ettiègne-Traoré V, Dabis F, Eholié S, Anglaret X. The financial burden of morbidity in HIV-infected adults on antiretroviral therapy in Côte d'Ivoire. PLoS One. 2010 Jun 18;5(6):e11213. doi: 10.1371/journal.pone.0011213. PMID: 20585454; PMCID: PMC2887850.
- 5. Begley S. Flu-Conomics: The Next Pandemic Could Trigger Global Recession. January 21, 2013. <u>https://www.reuters.com/article/us-reutersmagazine-davos-flu-economy/flu-conomics-the-next-pandemic-could-trigger-global-recession-idUSBRE90K0F820130121</u> (accessed January 6, 2021)
- Carriere, D. E., Marshall, M. I., & Binkley, J. K. (2019). Response to economic shock: The impact of recession on Rural–Urban suicides in the united states: Official journal of the american rural health association and the national rural health care association. *The Journal of Rural Health*, 35(2), 253-261. doi:<u>http://dx.doi.org/10.1111/jrh.12334</u>
- Hilsenrath P, Borders T. Ethics and Economics of the COVID-19 Pandemic in the United States. *Health Services Research and Managerial Epidemiology*. January 2020. doi:<u>10.1177/2333392820957661</u>
- 8. Kaufmann AF, Meltzer MI, Schmid GP. The economic impact of a bioterrorist attack: are prevention and postattack intervention programs justifiable? Emerg Infect Dis. 1997;3:83–94. DOI
- Meltzer, M. I., Cox, N. J., & Fukuda, K. (1999). The Economic Impact of Pandemic Influenza in the United States: Priorities for Intervention. *Emerging Infectious Diseases*, 5(5), 659-671. <u>https://dx.doi.org/10.3201/eid0505.990507</u>.
- 10. Pamuk, Ş. (2007) 'The Black Death and the origins of the 'Great Divergence' across Europe, 1300– 1600', *European Review of Economic History* 11, pp. 289–317.
- 11. Smith, R. D., Keogh-Brown, M. R., Barnett, T. & Tait, J. The economy-wide impact of pandemic influenza on the UK: a computable general equilibrium modelling experiment. *BMJ*, 2009, 339, b4571–b4571.

- 12. Veenstra N, Whiteside A. Economic impact of HIV. Best Pract Res Clin Obstet Gynaecol. 2005 Apr;19(2):197-210. doi: 10.1016/j.bpobgyn.2004.10.005. Epub 2004 Dec 13. PMID: 15778110.
- von dem Knesebeck, O., Mnich, E., Daubmann, A., Wegscheider, K., Angermeyer, M. C., Lambert, M., Karow, A., Härter, M., & Kofahl, C. (2013). Socioeconomic status and beliefs about depression, schizophrenia and eating disorders. *Social psychiatry and psychiatric epidemiology*, 48(5), 775–782. <u>https://doi.org/10.1007/s00127-012-0599-1</u>
- World Bank . International Working Group on Financing Preparedness; 2017. From Panic and Neglect to Investing in Health Security: Financing Pandemic Preparedness at a National Level.<u>http://documents.worldbank.org/curated/en/979591495652724770/pdf/115271-REVISED-FINAL-IWG-Report-3-5-18.pdf</u> accessed January 5, 2021
- 15. World Economic Forum Managing the Risk and Impact of Future Epidemics: Options for Public-Private Cooperation. 2015. <u>http://www3.weforum.org/docs/WEF Managing Risk Epidemics report 2015.pdf</u>