John Clymer: Thank you for joining the National Forums 2024 mid-year virtual convening on Making Equitable Hypertension Control a New Norm. We aim to identify actionable changes to enhance blood pressure management, especially in underserved populations. Throughout the meeting listen for successful strategies and practices that you can implement, and please be ready to share successful sustainable practices you have used to improve hypertension control. We will invite your input later in the convening. A word of gratitude for the National Forum's contributing members, Amgen, AstraZeneca, Merck and Novartis. Their support makes National Forum programs, including this convening possible.

Now, here are a few ways to help you maximize your engagement and your takeaways from this event. Please use the chat function to comment on the meeting topics, introduce yourself, share information and catch up with friends and colleagues. Helpful tips and links will also be placed in chat. To ask questions, use the Q&A feature. Please submit questions any time, especially when you're thinking of them. We will have a total of three Q&A sessions in which our speakers will respond to as many of your questions as time permits. Biographical sketches for all of today's speakers are in the virtual program book, available via the Zoom Resources button. Each speaker's X handle will appear on the screen and is also listed in the program book. Closed captioning is available, and you can control how it appears on your screen by using the CC button in Zoom.

Today's meeting is being recorded. If you have colleagues who cannot be with us right now, they can catch the whole meeting on demand in a couple of weeks. When the recording and meeting summary are posted, the National Forum will send you the link. Please share it with others who may be interested. Please feel free to post comments on your social media and share key points from the meeting with your network using the hashtag #NFHTN24. We do not have a scheduled break. Please step away as needed.

Turning now to our meeting theme, Making Equitable Hypertension Control a New Norm, let us challenge ourselves and our colleagues to drive meaningful change. The need to reverse and eradicate escalating and deeply entrenched hypertension disparities is urgent. We will introduce and discuss strategies and tactics you can use to achieve improved equitable outcomes. Now, it is my privilege to introduce our opening keynote speaker, Paul Reed. Dr. Reed is the Deputy Assistant Secretary for Health, and

Director of the Office for Disease Prevention and Health Promotion, and a rear-admiral in the U.S. Public Health Service. Dr. Reed.

Dr. Paul Reed: Well, thank you for the invitation to speak to you all at this mid-year meeting of the National Forum for Heart Disease and Stroke Prevention. We greatly appreciate the long history that the National Forum has had, collaborating across sectors to achieve our national health goals, as laid out in the Healthy People initiative for nearly two and a half decades, advancing cardiovascular health. The National Forum's efforts, which draw on Healthy People 2030 and are designed around our current understanding of existing science, are invaluable. Activities like Move with the Mayor, which use evidence-based recommendations to promote physical activity, improve cardiovascular health, enhance social connection, and build communities move us closer toward our nation's cardiovascular health goals, as do convenings like today's meeting and the important advocacy work of the National Forum.

Right up front, I'd like to share my congratulations with the National Forum. Just this past month, our Office of Disease Prevention and Health Promotion in HHS (Health and Human Services) designated the National Forum as a Healthy People 2030 Champion, recognizing this organization's commitment and contributions to our Healthy People 2030 vision of a society in which all people can achieve their full potential for health and wellbeing across the lifespan, advancing health equity, and promoting health literacy.

To the topic of today's discussion, I don't believe I need to belabour these statistics with this audience, but I would argue we couldn't possibly overstate them to the American public and decisionmakers. So, I'll share just a few sobering points here for emphasis.

Globally, hypertension affects more than 1.3 billion people, with 4 out of every 5 not receiving adequate treatment, and 10 million dying each year due to hypertension-related illness. In the United States, hypertension affects nearly half of adults, more than 119 million people. In 2021 alone, hypertension was the primary or contributing cause of over 690,000 deaths, roughly 275,000 more deaths than from the Covid-19 pandemic in that same year, and that occurs every year. High blood pressure costs our nation between $131 billion to $198 billion each year, not accounting for loss productivity due to non-fatal illnesses associated with high

blood pressure. By 2035, total costs related to uncontrolled hypertension are projected to balloon to $220 billion annually. These data clearly indicate why increasing control of high blood pressure in adults is a Healthy People leading health indicator, one of a handful of high priority Healthy People 2030 objectives selected to drive critical action toward improving health and wellbeing in this nation.

Admittedly, the magnitude of this problem can be overwhelming to comprehend. However, to be serious about addressing it, we must define just how big the problem with hypertension is. While not an emerging infectious disease with communicable risk, the extraordinary burden of disease and the sheer numbers of premature deaths attributable to hypertension demand that we see this for the pandemic that it is. We need a paradigm shift at all levels of society, including all aspects of government, that sees the scale and scope of the problem, takes stock of the impact on lives and livelihoods, weighs the economic burden, and advances a deliberate strategy to prevent and control hypertension.

Regrettably, as with many other chronic diseases, enormous disparities exist in hypertension prevalence and control, impacting people who are Black and Hispanic particularly hard. Hypertension does not discriminate based on gender but it does based on race and ethnicity. Importantly, other increasingly common modifiable factors with mark disparities further worsen cardiovascular disease risk, compounding the risks related to hypertension. These include having diabetes, overweight or obesity, eating an unhealthy diet, and being less physically active. Uncontrolled high blood pressure can increase the risk, also with notable disparities, for not just heart attacks but also strokes, vascular dementia, kidney disease and eye problems. And I might add, as we have learned in the past few years, hypertension is a key co-morbid condition leading to more severe disease with infectious aetiology, such as COVID-19.

Now, the number of affected people is unquestionably staggering, and while absent the underlying aetiology of an emerging infectious disease with risk of communicable spread, the data on morbidity, loss productivity, and premature death due to hypertension otherwise clearly paint the picture of a global pandemic. And yet, there's reluctance or perhaps ambivalence in seeing hypertension as an existential threat in the same way that we have for emerging biological threats such as SARS-CoV-2. However, given the overwhelming size of the problem of hypertension, it warrants a different perspective than we have previously held and consideration of a larger investment as we

have done for a pandemic. According to www.usaspending.gov, the total U.S. Government outlay for the COVID-19 response has been roughly $4.5 trillion to date. That is since 2020, in less than four and a half years.

The alternative perspective of hypertension as such a public health and societal threat, and a commensurate investment into mitigating the threat, could potentially prevent hundreds of thousands of deaths every year in the United States alone. So why don't we take this approach? For one, hypertension, both at the individual level and the population level, is largely a silent disease. That is until the point when it isn't. It's hard to be alarmed by something that is out of sight and therefore out of mind. But we all know, like infection with a novel virus, just because there may not be immediate outward signs of the effects of high blood pressure doesn't mean that it's not impacting you or someone you love, including and worse still, building toward a potentially critical event like a heart attack or stroke.

While there's no vaccine, no one off cure and no mask you can wear to ward off high blood pressure, that shouldn't keep us from thinking of hypertension in terms of a pandemic and doing more to mitigate or even eliminate its impact. In between the global statistics I mentioned defining the burden of hypertension-related disease and the systolic and diastolic readings on an individual person's blood pressure monitor are the myriad factors in our communities, in our environments, and in human behaviour that contribute to the prevalence of hypertension and offer opportunity to change our approach to mitigating its impact. Our longstanding, very individualized clinical approach to recognizing and treating high blood pressure, while imperative, misses an opportunity to understand all the factors contributing to someone's hypertension and related disease, and potentially help improve a person's broader health outcomes.

Managing hypertension should be about much more than measuring blood pressure and prescribing antihypertensive medications. Addressing hypertension requires a significantly broader approach that seeks to better understand and invest in people and their life circumstances, one that necessitates collaboration across sectors if we're to address inequities and social determinants that contribute to hypertension risk. As with all health promotion and disease prevention strategies, and consistent with tenants of managing communicable disease, solutions to minimizing risk for hypertension shouldn't be solely between individuals and their healthcare providers.

The conditions in the environments where people live their daily lives are critical to mitigating risk. These social determinants of health, the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning and quality of life outcomes and risks play the predominant role in one's opportunity to lead a healthier life, including preventing and managing hypertension risk. In the context of hypertension, however, simply promoting healthy choices, such as encouraging reduced salt intake or increased physical activity, is not enough. Any public health strategy to improve heart health and lesson hypertension must include approaches that ensure environments that enable healthy living. This includes the means to improve equitable access to preventive health services, access to affordable nutritious foods, and improving physical spaces to help people be more active. A comprehensive strategy to address high blood pressure in individuals and at population scales has the potential to be the exemplar of community-centered care, promoting greater overall health, wellbeing, and personal resilience.

So how do we treat people in communities and not just treat the numbers on a sphygmomanometer? Well, treating people does mean more regular hypertension screening, including self-monitoring of blood pressure, but it also means having more conversations with patients, loved ones, and communities about the importance of hypertension prevention and control in the context of their lives, and more promotion and education of preventive measures such as increased physical activity and healthier eating patterns. For our part at the Office of Disease Prevention and Health Promotion in the Federal Government, treating people and not just the numbers means, in part, fully implementing the Federal Hypertension Control Leadership Council's Physical Activity Action Plan across government agencies, and using the wealth of available federal resources, such as the Physical Activity Guidelines for Americans and its related Move Your Way® communications campaign, and Healthy People 2030’s evidence-based resources to help get people moving more.

Most importantly, treating people and not just the numbers for all of us should mean taking collective and collaborative steps towards solutions that cross sectors, much like the recent response to the COVID-19 pandemic, a truly concerted effort to address diverse aspects of people's lives that affect their risks. Like through the COVID-19 pandemic, that requires a higher level of concern, investment, and deliberate collaboration amongst Government

agencies, healthcare systems, businesses, and community organizations, an integrated approach with all hands-on deck. For public health professionals and policymakers, understanding the drivers of high blood pressure, including the many social determinants of health, and the implications of hypertension across populations means addressing much broader concepts with focused attention. Key considerations that define the broader context within which to consider hypertension include, for example, the fact that fewer than 1 in 4 adults in this country meet recommendations in the physical activity guidelines, and most Americans don't follow a healthy eating pattern consistent with the dietary guidelines for Americans.

These aren't issues that can be addressed by healthcare alone. Health professionals and organizations across sectors of society need to take steps to support individuals and communities with the opportunities to make better informed and healthier lifestyle choices. A provider can suggest that a patient get more physical activity as part of their clinical care plan to reduce the risk for or treat hypertension, but if that person has barriers preventing them from being more active, such as a lack of safe spaces, then they're less likely to act on that suggestion. Both in the clinical setting as well as politically and societally, we must ask nuanced questions, like “What does this person or these people eat and why? What is their ability to access affordable, culturally relevant, nutritious food? What do they do for play or recreational activity? Where do they live and work? What is their commute like? What are the social supports they rely on, and what other life circumstances may be contributing to elevation of blood pressure for this person or this group of people?”

And when we have these answers, regardless of whether we're seeing a patient in a clinical setting, developing public health programming, establishing school meal standards, vetting legislation in Congress, or planning corporate responsibility or employee wellness programs, we'll need to leverage that nuanced understanding of people's lives and invest in their circumstances.

Collectively working to improve the conditions, opportunities, motivation, and means to be more physically active may be one of the single best areas to affect change in hypertension risk and control for individuals and communities. It's easier said than done for many people in many communities across the country, however. Taking a walk is something many of us likely take for granted but many Americans would struggle to find a way to do just that safely.

Nonetheless, by encouraging and enabling small changes in levels of physical activity, healthier blood pressure is one of the outcomes that we can see almost immediately, with benefits beginning to appear even before someone gets to the recommended 150 minutes of weekly physical activity. What's more, people who start to move more also reap other benefits that come with increases in physical activity, including sleeping better, feeling better emotionally, and having an increased ability to perform daily tasks; outcomes that have benefits beyond managing blood pressure, outcomes that favor people's health and wellbeing in numerous ways.

We all know that following a heart healthy eating pattern, like the dietary approaches to stop hypertension or DASH (Dietary Approaches to Stop Hypertension) diet and eating less salt can lower blood pressure significantly. This is something that many of us also take for granted, but which can be a practical impossibility for many Americans, given how limiting it is trying to access affordable healthy foods. Like systematically and comprehensively addressing the social conditions that affect one's ability to be physically active, there is an imperative that we, as a whole of society effort, change the nutrition landscape, such that accessing good nutrition is the easy choice for everyone. Obviously well beyond preventing and controlling hypertension, the prospects of improving the health and wellbeing of Americans through better nutrition are immense.

Achieving such universal access to affordable good nutrition does demand seismic change in our society, from how and where food is produced, to how it is accessed, to how we value it in our lives, including the concept that having access to good nutrition is a right. If we can imagine such imperatives and we can muster such seismic shifts in the way government and society responds to emerging biological threats, surely, we can imagine the imperative to affect these kinds of changes that have the potential to impact the enormous burden of disease related to hypertension. Thank you.

John Clymer: Thank you, Dr. Reed. The National Forum is thrilled to be named a Healthy People 2030 champion. It inspires us to redouble our efforts to help our nation achieve its health goals. Now, before we look at the business case for hypertension control, let's see some of the creativity in response to the call for haiku.