



July 8, 2020

Admiral Brett P. Girior, MD
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U.S. Department of Health and Human Services
Office of the Assistant Secretary for Health
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### Dear Assistant Secretary Giroir:

The Infectious Diseases Society of America (IDSA) and the HIV Medicine Association (HIVMA) greatly appreciate the opportunity to provide feedback on the important issue of health system resilience, and we thank you for your thoughtful, inclusive and data driven approach to this topic. Many lessons learned from our current response to COVID-19 can help us better prepare our health systems for future outbreaks, pandemics and other public health emergencies. As infectious diseases (ID) physicians, scientists, public health practitioners and other health care professionals, our members are on the frontlines of the COVID-19 response, and our firsthand knowledge can help inform further federal efforts.

### **Barriers and Opportunities for Health System Resilience**

## 1. What have been the most significant barriers to assessing, monitoring, and strengthening health system resilience in the U.S.?

The shortage of public health and infectious disease (ID) experts poses a major barrier to monitoring and strengthening health system resilience. There is an insufficient number of these experts to lead efforts to assess, monitor and strengthen health system resilience, especially as regards epidemic and pandemic infections. Efforts to improve health system resilience should be led through a partnership between public health and the physician clinical workforce, particularly the ID physician workforce and other ID health professionals in the context of infectious disease outbreaks. ID physicians often lead hospital emergency preparedness and response programs, of which resiliency is a key component.

Unfortunately, the public health workforce was hit hard by the 2008 recession. Local and state health departments have lost nearly a quarter (23%) of their workforce since then, which amounts to over 50,000 jobs across the country. The challenges are compounded by the increased age of the public health workforce – almost a quarter of current health department staff are eligible for retirement.

There is some overlap between the public health workforce and the ID physician workforce, as ID physicians typically play an important role in public health efforts and in the leadership of local and state health departments. Most ID physicians focus on patient care, and this clinical workforce is also under significant strain. There has been a 22% decline in the number of applicants to infectious diseases fellowship training programs from 2011-2016. The last few years saw only modest improvements in

numbers of fellowship applications and number of applicants have since plateaued. IDSA surveyed internal medicine residents in 2014 and found financial concerns were the chief barrier to pursuing ID careers. Specifically, data published by Medscape in 2019 indicate that average annual salaries for infectious diseases physicians are below all other medical specialties except pediatrics, family medicine, endocrinology and public health-- even below the average salary for general internal medicine. ID training and certification requires an additional 2-3 years of study beyond completion of an internal medicine or pediatrics residency, prolonging the time that trainees do not make a competitive salary and often must defer paying off student loans. Salaries for the highest-paying specialties are nearly double the salaries for infectious diseases. Given that the average medical student debt is \$200,000, infectious diseases is not a financially feasible choice for many residents who might otherwise choose ID. As a result, Infectious diseases training slots have gone unfilled over the previous decade, as new physicians have pursued specialties generating higher compensation.

As the number of physicians specializing in infectious diseases continues to fall short of the need, nearly two-thirds of Americans live in areas with little or no access to an infectious diseases specialist, according to a study published online on June 4, 2020 in the *Annals of Internal Medicine*. As the COVID-19 pandemic has spread across the nation, 2,499 counties—nearly 80% of the 3,142 counties in the U.S.-do not have a single physician specializing in infectious diseases.

# 2. What policies and programs can be improved to mitigate the risk of COVID-19 and avoid negative impacts on patient outcomes?

### Wearing Masks/Face Coverings and Physical Distancing

With access to the appropriate resources, living and working conditions, individuals can help mitigate the risk of COVID-19 by wearing masks or face coverings and maintaining social distancing recommendations. These preventive measures are effective at reducing COVID-19 transmission and are particularly important as states continue re-opening and people spend more time outside of their homes. Until a safe and effective vaccine is discovered and is widely available, these are our best tools for preventing the spread of infection. Unfortunately, in many communities across the country, high numbers of people are not wearing masks or face coverings and not maintaining appropriate distance. The federal government should launch a public education campaign to emphasize the importance of wearing masks and face coverings and of maintaining a safe physical distance in addition to avoiding large gatherings. Moreover, the leadership of the federal government should model these behaviors for the public.

### Telehealth

The increased flexibilities with regard to telehealth have been critical to allowing patients to continue accessing health care without risk of COVID-19 acquisition. As states experience ongoing surges in cases and we prepare for ongoing waves of COVID-19 cases in the fall and winter when seasonal influenza will be more active, it remains critical that we continue to leverage telehealth for the foreseeable future and beyond. We strongly urge that the following policies be maintained within the Medicare payment system and to require or incentivize state Medicaid programs and private insurers to adapt these policies:

- Provide payment for telehealth visits on par with payment for a comparable office/clinic visit, including comparable payments for visits conducted via telephone for individuals who lack internet access.
- Allow beneficiaries to receive telehealth services from any location, including their home, inpatient settings and nursing facilities.
- Remove the geographic restrictions so that beneficiaries are not required to be in a rural area.
   Rurality often means that internet access is limited or unavailable.
- Waive the HIPAA requirement to allow the use of audiovisual platforms, including Apple FaceTime, Facebook Messenger Video Chat, Google Hangouts, Skype, Zoom.
- Allow physicians and other practitioners to provider telehealth services from alternative locations such as their homes without changing their Medicare enrollment location.

In addition to maintaining the flexibility outlined above, an investment in resources for patients to have access to the technology and equipment that they need to engage in telehealth is essential. Currently, many of the patients who could benefit the most from telehealth services face the biggest challenges to accessing it due to limited access to Internet and phone services and/or not having a mobile phone, a smartphone or a computer. This is especially true in rural areas, where residents are also at high risk for the most severe consequences of COVID-19 due to underlying co-morbid conditions— such as diabetes, cardiovascular disease, obesity, and chronic lung disease—and limited access to hospital care. In addition to a significant investment in supporting broadband Internet services in communities across the United States, we urge a significant investment in the Lifeline program to support uninterrupted access to phone and Internet service for low-income individuals—especially those most vulnerable to the severe outcomes of COVID-19.

### **Personal Protective Equipment**

Multiple studies have confirmed that the use of personal protective equipment (PPE), specifically N95 respirators for clinicians providing care that has the highest risks of COVID-19 transmission, is highly successful in preventing transmission. Unfortunately, despite ongoing efforts, inadequate supplies of PPE persist, and place health care professionals at serious risk of preventable infection, that they can in turn transmit to other patients, colleagues and family members.

GetUsPPE, a web-based platform through which health care facilities can communicate their PPE needs reported that, as of May 2, more than 6,000 health care facilities submitted requests for PPE, including hospitals, outpatient clinics, and skilled nursing facilities. N95 respirators were requested by 74% of facilities, making them the most requested type of PPE. This is a conservative estimate of PPE need, as only facilities aware of the platform could report.<sup>2</sup> Frontline health care providers continue to report that they are reusing PPE, even in areas where cases of COVID-19 are declining, because they cannot

<sup>&</sup>lt;sup>1</sup> Chu D et al. Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. June 1, 2020. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31142-9/fulltext

<sup>&</sup>lt;sup>2</sup> Gondi S et al. Personal protective equipment needs in the USA during the COVID-19 pandemic. May 14, 2020. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31038-2/fulltext

rely on a dependable supply over the long term. A strong U.S. supply chain for PPE is particularly critical, as some states and facilities—including Washington state—have purchased defective PPE from foreign suppliers. As health care facilities resume elective procedures and as other sectors of the U.S. economy require PPE for reopening, PPE demands are increasing significantly, leaving health care providers deeply concerned about continued PPE supply.

To help ensure a sufficient supply of PPE, we recommend the following:

- Develop and implement a long-term, national strategy to rapidly and effectively assess PPE needs, including N95 respirators, powered air purifying respirators (PAPRs), controlled air purifying respirators (CAPRs), masks, gowns, gloves and face shields, and scale up the domestic manufacture of PPE, including broader and continued utilization of the Defense Production Act. This is essential because currently manufacturing of PPE is concentrated abroad, particularly in China. Distribution of PPE must be transparent and data-driven, and clear communication between the federal government and state and local officials regarding the availability and delivery schedule of medical supplies must be ensured.
- Federal public health authorities should partner with medical societies with expertise in
  infection prevention and control to provide clear, evidence-based guidance regarding the type
  of PPE needed for providers and patients in ambulatory and surgical settings as well as other
  sectors of the U.S. economy requiring PPE for reopening. Until a robust supply of surgical masks
  and N95 respirators is available, guidance should be provided to prioritize their use for frontline
  and essential workers where they are needed most.
- Federal public health authorities should provide clear guidance to health care facilities on how
  to fit test the masks on health care providers that will ultimately use them during a surge in
  cases as supplies allow.

### **Testing Capacity**

Significant testing capacity is the key component of our strategy to reduce the impact of COVID-19. The Kaiser Family Foundation compared multiple models for calculating national-level testing capacity and determined that a robust national strategy requires conducting 1.25 million tests per day or 8.75 million per week<sup>3</sup>, which means testing approximately 2.7% of the U.S. population weekly. National testing reports have consistently fallen far below even the lowest estimated targets, and supply limitations continue to daunt frontline providers and patients. Multiple laboratories have reported skewed distribution of tests to larger reference centers without corresponding need. Skilled personnel and testing supplies including reagents and swabs remain in short supply in many areas. While the recent infusion of HHS funding for expanded testing capacity will help alleviate existing shortages, capacity remains insufficient for a long-term, strategic response. Beyond the immediate challenges, a successful national testing strategy must consider medium- and long-term planning for capacity, including for supply stockpiles, public health workforce and infrastructure, and health system preparedness.

Improved surveillance is essential to gather accurate data about infection rates and severity of disease, which help inform our responses. We appreciate the steps already taken to expand access to testing, including current policies requiring insurance coverage of COVID-19 testing. However, we are concerned that current policies do not require insurance coverage of testing for surveillance or

<sup>&</sup>lt;sup>3</sup> https://www.kff.org/coronavirus-policy-watch/what-testing-capacity-do-we-need/

employer "return-to-work" purposes. As states progress in their re-opening plans, including re-opening schools and universities, access to testing for "return to school" and "return-to-work" purposes will be important to ensure that re-opening progresses as safely as possible, and that infected individuals are identified before they can transmit COVID-19 to others.

Specifically, we recommend the following steps to boost testing capacity:

- Develop a federal strategy to ensure the development of adequate tests, and transparently and
  equitably distribute testing kits and supplies. Ideally, investment in rapid, point-of-care (POC)
  diagnostic tests that have acceptable performance would be optimal to minimize the demands
  of having to follow up with patients and the delay imposed by the patients awaiting test results
  for several days that is a period of potential transmission if they are infected.
- Expand testing locations to encompass all areas of need, considering population density and heavily impacted communities, and expand deployment of accurate rapid POC tests to reduce reliance on large commercial reference laboratories.
- Incentivize and streamline the research and development of tests utilizing alternative specimen sources (nares, saliva), alternative media (saline), and alternative collection devices, which will reduce PPE needs for testing and alleviate shortages of testing supplies.
- Utilize technology to communicate negative test results to relieve significant workload on health care personnel.
- Future testing plans should incorporate the need for sentinel monitoring of high-risk populations, including individuals who are incarcerated, homeless, disabled, have substance use disorders, populations disproportionately impacted by COVID-19 (including African American, Latinx and Native American communities), senior living facilities, skilled nursing facilities, and congregate living settings. Plans also should include guidance on how real-time data can be used to improve monitoring where it is needed most in close settings with large numbers of people, such as schools and food processing plants. Sentinel monitoring systems should further aim to identify asymptomatic cases.
- Fund studies necessary to determine the clinical sensitivity and specificity of all available tests and clearly communicate the results publicly.
- Require insurance coverage of testing for surveillance and "return to school" and "return to work" purposes.

#### **Contact Tracing**

The practice of contact tracing is critical to identify individuals who have been exposed to COVID-19 and contain the spread of the virus and has been found to be an important component of successful efforts to contain COVID-19 in other countries.10 A robust public health workforce is needed to ensure a sufficient and well-coordinated contact tracing workforce and to support public cooperation with contact tracing. Experts estimate that anywhere from 180,000 to 300,000 contact tracers are needed.

### Recommendations:

 Ensure sufficient funding to hire and train contact tracers. Given the disproportionate impact of COVID-19 on communities of color, a diverse group of contact tracers must be deployed, including individuals who are part of heavily impacted and underserved communities.

- Prioritize contact tracing for populations at greatest risk of transmission and potential superspreader events.
- Provide federal guidance for utilization of multiple models of contact tracing, including traditional methods and deployment of phone-based and innovative technology-based methods to reduce reliance on limited personnel. Guidance should clearly explain the steps and elements of effective and feasible contact tracing and include recommendations for instances in which optimal tracing of all cases and all contacts is not possible.
- Develop and implement an evidence-based public education plan to encourage individuals to
  engage with contact tracers and share information about where they have been and with whom
  they have been in contact. Responses to the 2014-15 West Africa Ebola outbreak demonstrated
  the importance of community engagement in the success of contact tracing, and partnerships
  with community-based organizations in communities throughout the U.S. should be leveraged
  to increase the effectiveness of contact tracing.
- Provide support to help individuals who have been exposed or who have tested positive to
  isolate and quarantine, including providing safe locations for isolation and quarantine
  (particularly for individuals experiencing homelessness or living in settings in which isolation and
  quarantine is not possible), paid sick leave, food and access to medical care.
- Develop a national contact tracing plan to ensure coordination of contact tracers across state lines to appropriately follow and contain the spread of COVID-19.

# 3. What scientific advances are needed to assess and address vulnerabilities in the U.S. healthcare system during the COVID-19 response and in future disturbances to the healthcare system?

There are many important research questions that must be studied and new scientific tools that must be developed and deployed in order to help us better assess and address vulnerabilities in our health care systems. We need accurate, widely available point-of-care diagnostic testing to better capture the local burden of disease, reduce challenges and burdens associated with longer test turnaround times that result in increased opportunities for transmission. We need safe and effective therapeutics to treat COVID-19 in outpatient settings to minimize the need for hospital admissions. We need more robust data to make clear the factors that are driving the profound disparities in infections and deaths in Black/African American and Latinx communities. IDSA developed <a href="this set of COVID-19 research recommendations">this set of COVID-19 research recommendations</a>.

### **Key Indicators & Data Sources of Health System Resilience**

1. What is your definition of health system resilience within the context of your organization? Does the definition of resilience need to be defined differently based on geographic region and/or the domain of healthcare being assessed?

The definition of health system resilience should include the ability to meet patient needs while maintaining an adequate healthy clinical workforce capacity. Patient needs encompass both COVID-19-specific as well as routine health care needs. While this standard should be uniform across the country, several factors can impact the type and amount of resources needed to achieve resiliency. In addition to geographic region, a host of variables impact how individuals access health care and what barriers they face. These variables include age, sexual orientation and gender identify, race and ethnicity; health

insurance; socioeconomic, housing, and disability status; and access to transportation. The current pandemic has revealed anew the glaring health inequities within the U.S health care system. According to CDC's COVIDView, non-Hispanic Black and non-Hispanic American Indian/Alaska Native populations have a hospitalization rate approximately 4.5 times that of non-Hispanic whites, while Hispanic/Latinx have a rate approximately 3.5 times that of non-Hispanic whites. Based on data from 40 states, the mortality rate due to COVID-19 among African Americans is 2.4 times as high as the rate for whites and 2.2 times as high as the rate for Asians and Latinx. Our ability to meet the needs of all our patients—particularly the most vulnerable—is a key benchmark for evaluating the health system's resiliency.

The pandemic has significantly increased stress for already stressful health care professionals. Grief, stress, anxiety and depression over not being able to save patients, fear of contracting COVID-19 and transmitting it to their loved ones, and exhaustion due to long, grueling shifts are chief concerns. An insufficient number of ID physicians compounds the challenges, which can in turn impact job satisfaction and performance and lead to burnout.

In late April, the National Center for Health Statistics began partnering with the Census Bureau to collect data on the mental health impacts of the pandemic. The data indicate that a third of Americans now show signs of clinical depression or anxiety, a rate twice as high as before the pandemic. Experts believe the rate is much higher among first responders, including health care providers. Of more than 1,200 health care workers surveyed in China, roughly half showed symptoms of depression or anxiety, according to a JAMA Open Network article published in March. More than a third of those surveyed reported insomnia, and 70% said they were distressed. Suicides of physicians and emergency medical staff in heavily affected areas have been reported in the U.S.

### 2. What key indicators or data sets are being used within your organization to assess health system resilience?

We look to CDC as a critical source of data to help us assess health system resilience. Data on COVID-19 tests (total number of diagnostic tests performed and percent positive), and COVID-19 hospitalizations and deaths are all essential to track the course of the pandemic and the impact of policy decisions, which have a direct impact on our health system resilience. We are concerned by the limitations of the current data available due to a lack of uniform definitions and comprehensive reporting of key data including race, ethnicity and deaths due to COVID-19.

We also routinely assess CDC data on immunization rates and are deeply concerned by the significant decline in routine immunizations during the pandemic. During the week of April 5, the administration of MMR vaccines dropped 50 percent; diphtheria and pertussis vaccines dropped 42 percent; and HPV vaccines dropped 73 percent. Doses distributed under the Vaccines for Children program, which provides vaccines for uninsured and particularly vulnerable children, have steeply declined as well; doses in Massachusetts were down 68 percent in the first two weeks of April, and MMR doses in

<sup>&</sup>lt;sup>4</sup> CDC. COVIDView. Ma 23, 2020. Online at: <a href="https://www.cdc.gov/coronavirus/2019-ncov/covid-data/pdf/covidview-05-29-2020.pdf">https://www.cdc.gov/coronavirus/2019-ncov/covid-data/pdf/covidview-05-29-2020.pdf</a>. Accessed June 3, 2020.

<sup>&</sup>lt;sup>5</sup> APM Research Lab. The Color Of Coronavirus: Covid-19 Deaths By Race And Ethnicity In The U.S. May 27, 2020. Online at: https://www.apmresearchlab.org/covid/deaths-by-race. Accessed June 3, 2020.

<sup>&</sup>lt;sup>6</sup> https://www.cdc.gov/nchs/covid19/pulse/mental-health.htm

Minnesota were down 71 percent toward the end of March. This scenario places us at risk of outbreaks of vaccine preventable, highly contagious infections such as measles and pertussis, further straining health systems.

As noted above, a healthy health care workforce is a critical indicator of health system resilience. The CDC reports that over 75,000 health care personnel have become infected with COVID-19, with over 500 deaths. However, the CDC data collection capabilities are limited, and many believe the actual numbers are significantly higher. A project launched by Kaiser Health News and The Guardian suggests that nearly 600 health care workers – 1.5 times the number reported by the CDC -- in the U.S. have died from COVID-19.8

Lastly, we are monitoring financial impacts on health systems including rural hospitals and community clinics, that have a range of impacts on patients, providers and health system resiliency. Many hospitals and health systems are experiencing serious financial challenges due to the pandemic, and those challenges often directly impact physicians, nurses and other health care workers through salary cuts and other detrimental measures. In May 2020, the American Hospital Association estimated a total fourmonth loss of \$202.6 billion for America's hospitals and health systems due to the pandemic, or an average of \$50.7 billion per month. This includes costs associated with hospitalized COVID-19 patients, lost revenue due to canceled procedures, and costs associated with purchasing PPE and providing other supports for frontline health care workers (childcare, housing, transportation, medical screening and COVID-19 treatment).<sup>9</sup>

# 4. What selected health conditions should be used as indicators of healthcare availability, access, timeliness, and quality, in terms of treatment and preventive services?

Data on infectious diseases provide an important and unique perspective, as they impact individual patients and, given their transmissibility, they also impact communities. Infectious diseases that are vaccine-preventable (e.g. influenza, measles, shingles, pertussis) or preventable by routine screening, treatment access and preexposure prophylaxis (PrEP) for HIV, screening and treatment for hepatitis C, and syringe services programs for preventing HIV and hepatitis B and C—are important indicators of health care availability, access, timeliness and quality. Spikes in the rates of any of these infections indicate a serious health care system problem for which existing solutions must be rapidly and appropriately deployed. As greater numbers of health department and ID providers have been focused on COVID-19, routine work to prevent and control other important infectious diseases such as antimicrobial resistant infections, sexually transmitted infections, tuberculosis, HIV/AIDS, and health care associated infections has been deferred. This increases the risk of spreading these important infections in the community. Resources are essential to address these important public health challenges while still combatting COVID-19.

<sup>&</sup>lt;sup>7</sup> https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html

<sup>&</sup>lt;sup>8</sup> https://khn.org/news/lost-on-the-frontline-health-care-worker-death-toll-covid19-coronavirus/

<sup>&</sup>lt;sup>9</sup> https://www.aha.org/guidesreports/2020-05-05-hospitals-and-health-systems-face-unprecedented-financial-pressures-due#:~:text=The%20AHA%20estimates%20the%20net,treating%20COVID%2D19%20patients%20alone.

### **Public/Private Data Sources**

### 2. How are you using these data sources to inform your public health response?

IDSA routinely communicates data about COVID-19 and its impact on health systems to our members to help their local responses. In partnership with the CDC, we are scaling up new learning networks to strengthen educational opportunities for ID physicians and other key partners in health care. We are also using data to drive our policy recommendations for federal, state and local leaders.

### **Public-Private Partnerships**

## 1. Provide ideas of the form and function of a public-private partnership model to continually assess and monitor health system resilience and individual as well as population health outcomes?

In addition to the diseases/conditions above, we also recommend the following indicators be regularly monitored and assessed to provide a clear snapshot of the status of health system resiliency and identify gaps for policymakers: hospital capacity, ICU capacity, PPE supply, supply of test kits and testing materials, access to testing and test results. In addition, the partnership should develop metrics and a process to assess and monitor the physical and mental health of the health care workforce.

### 2. What private and public sectors should HHS engage as part of such a collaborative effort?

Given the complexity of health systems, it will be important to engage a wide variety of stakeholders, including medical societies and other organizations that represent health care providers, public health, and industry partners responsible for the development and manufacture of PPE and other medical supplies, diagnostic tests, vaccines and therapeutics.

Once again, IDSA and HIVMA thank you for your attention to the issue of health system resilience and for this opportunity to provide comments. We would be happy to assist your office with work on this issue in any way. If you have any questions, please contact Amanda Jezek, IDSA Senior Vice President of Public Policy & Government Relations at <a href="majezek@idsociety.org">ajezek@idsociety.org</a> or Andrea Weddle, HIVMA Executive Director at <a href="majezek@idsociety.org">aweddle@hivma.org</a>.

Sincerely,

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