THE COVID-19 PANDEMIC DIGEST

Volume 2 / Issue 2

Dear Colleagues,

From atop the pandemic's first peak, we can reflect on the strengths and weaknesses of the pandemic response thus far. As attention and debate inevitably shift toward the loosening of social restrictions, "[w]e must remain vigilant and disciplined" in our population health approach, for our patients, our families, and for each other's families.

In preparation, this issue will discuss important elements for vigilance and discipline, including:

- Global concern regarding under-reporting of COVID-19
- Removal of U.S. funding from the World Health Organization
- Testing capabilities and "immunity passports"
- The Covidnearyou.org tracker
- Racial disparities in COVID-19 cases
- Cautionary tales of re-socialization from across the globe
- President Trump's 3-Phase plan for re-opening the economy
- PPE challenges
- The AAFP Foundation Relief Fund and other funding opportunities

The results of our first survey have also been made available to you, and a second survey is being distributed. We are using their results to further advocacy and educational efforts. We appreciate your participation and hope you find the results informative.

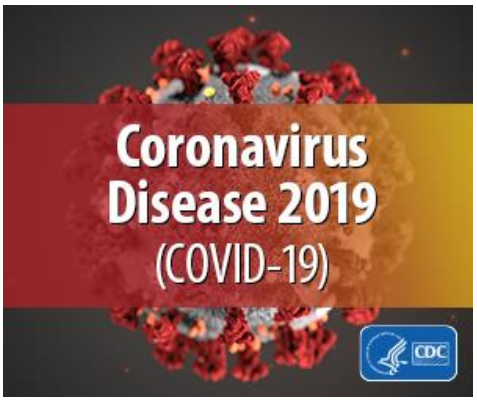
We thank you for helping provide stronger medicine for America.

Michelle Prentice, MD MSc
mprentice@mcw.edu |LinkedIn

"We must remain vigilant and disciplined."

German Chancellor Angela Merkel

April 20, 2020



April 20, 2020 Edition

A special thanks to Marie Prentice, Prentice Communications Inc., for her editorial support.

The COVID-19 Pandemic Digest

SURVEILLANCE & DETECTION STRATEGIES

GLOBALLY, **there are now almost 2.5 million confirmed cases of COVID-19 across over 177 countries, the distribution of which can be seen on the Johns Hopkins University's COVID-19 Global Cases Map.**

Meanwhile, global fatalities have risen to 165,000, with the largest contributions from the U.S., followed by Italy, Spain and France. Italy in particular has an astonishing case fatality rate of 13.2%, compared with the world average of 5.85%. The reason is likely multifactorial, but is speculated to include their aged population, as the WHO reports that over 95% of deaths in Europe were in those over age 60.

Interpretation of these statistics must be made with caution. Infection rates are heavily underrepresented across developing countries where testing and reporting capabilities are most severely lacking. Also, with China now claiming a disproportionate 4% of global cases, suspicion continues to mount that they have concealed a throng of cases behind their walls. Questions regarding censorship and detainment of Chinese physicians persist amidst reports that a known whistleblower, Dr. Ai Fen, has recently gone missing. With the weight of the pandemic now thrust upon America's shoulders, President Trump no longer has confidence in China's "efforts and transparency". He is instead accusing China and the World Health Organization (WHO) of being in league, "severely mismanaging and covering up" the spread of the virus, and dispersing "Chinese misinformation". He has ordered that U.S. funding of the WHO (representing 10% of their budget) be suspended while his administration reviews their actions at the onset of the pandemic – ones he believes to have endangered the U.S. The WHO endeavors forward in coordinating a global response to COVID-19 and the other epidemics on their docket, but admits this decision puts them in a regrettable position. Many U.S. organizations have also voiced their opposition to this defunding.

In another bold move, the Trump Administration strengthened its ties with Taiwan - a state of East Asia who has made similar accusations of China and the WHO. Passing the TAIPEI Act on March 26, 2020, the Administration committed to altering relations with those who undermine Taiwan's prosperity. Given its historically controversial divergence from China, the WHO has refused to recognize Taiwan as a distinct nation, abiding instead by the "One China policy". This has not stopped the global press, however, from heralding Taiwan as a singular success story in their COVID-19 surveillance efforts. The island is yet to have more than 420 cases, despite (1) their adjacency to China Mainland; (2) their population of 24 million in the 17th most population dense region in the world (the US sits at 174th), and; (3) their lack of support from the WHO when they reached out for assistance back in December 2019. The WHO's baffling sidestep of questions regarding the strength of Taiwan's independent strategy has been recorded on video, leading additional members of the press to further speculate on their allegiance. The World Medical Association has recently interceded as well, sending a letter to the WHO, asking it to instate Taiwan into membership, and not to be "involved anymore in political games". It remains to be seen how these changing alliances will affect the ongoing pandemic

response on a global scale, as well as the response to other ongoing and future health epidemics.

From what has been reported, the daily global incidence of COVID-19 appears to have peaked at almost 100,000 new cases on April 4. Yesterday only saw 84,000 new cases added.

In other good news, over 600,000 people have recovered from COVID-19. This includes England's Prime Minister Boris Johnson, who was discharged from NHS care after a week in inpatient and ICU treatment. As the gap is narrowing between surveillance capabilities and incidence rates, many regions have begun to interpret this as an opportunity to lift containment and suppression measures. A new surveillance concern casts a shadow over this interpretation, however. In South Korea, more than 150 patients retested positive after being released from quarantine, which their Center for Disease Control and Prevention suggests is due to virus re-activation. Scientists are still hoping for cross-immunity amongst the known strains of the novel coronavirus, given that the alternative would mean repeated global outbreaks.

The WHO's recommendation for broad testing is still unchanged; recommendations as to 'retesting' after quarantine vary and depend on supplies. Many countries are considering use of antibody tests as "immunity passports"- a concept already being piloted in Germany as a means to guide their socioeconomic re-entry. The validity of these serological tests is still under question however, with concern that results could still represent active or passive infection, or even infection by other types of coronaviruses.

NATIONALLY, **the U.S. remains a misfortunate leader in COVID-19 prevalence. We host 31% of the world's cases (over 760,000), almost quadrupling that of the next leading country, Spain. Nearly 40% of cases are found in New York City.**

Daily incidence appears to have peaked on April 10 at 35,000 cases, with only 27,000 new cases added yesterday. It is still too early to tell, however, as 99% of Americans remain untested. Actual case counts are grossly underestimated, particularly since approximately 25% of cases are thought to be asymptomatic. Despite the CARES Act, and six weeks of private sector approval to manufacture test kits, national supply-chain issues remain the prohibitive bottleneck to case detection and containment. This has affected even the highly touted five-minute point-of-care test by Abbott, which falls further out of favor amidst internal hospital system studies suggesting a false negative rate between 7.5% to 25% when compared to traditional tests.

On the serology testing front, since Cellex Inc. received the first emergency use authorization from the FDA, over 70 additional companies have been given the same permissions to develop antibody tests. These tests have not been reviewed by the FDA though, and an article in JAMA cautions that many of them use lateral flow assays, providing purely qualitative results, rather than quantitative results from ELISA testing. While their sensitivities and specificities have been fairly well-documented, experts also warn these tests should not be used for diagnostics, but rather as potential proof of immunity.

A robust national detection and surveillance strategy, incorporating both rapid molecular tests and serology tests, as well as thorough contact tracing, has been proposed by the Johns Hopkins' Center for Health Security. They plead with congress for an additional $3.6 billion in emergency funding support to do so. Senate Democrats are already on board, pushing for a broader, $30 billion plan to enable "fast, free testing in every community" as part of the next pandemic relief package. After initially promising that "anybody who wants a test can get a test", both Trump and the NIH have pivoted, stating that tests are unnecessary in much of the country prior to the economy re-opening. The reasoning is unclear, but speculations suggest it is based on current infection rates and population density. Still, the senate is looking to pass a new bill, known as the Paycheck Protection Program and Health Care Enhancement Act, that adds $25 billion for COVID-19 testing.

In the meantime, the CDC continues to revise its priority list for COVID-19 testing. Regrettably, the list has yet to consider minority and marginalized populations. Though data on racial and ethnic disparities was initially scant, we now know that a disproportionate amount of cases and fatalities are seen amongst black or Hispanic populations in the more metropolitan areas, with black Americans making up as many as 30% of the nation's cases, despite accounting for 13% of the total population. The reason for the disparities is thought to be multifactorial, but undoubtedly serves as further evidence of health systems and socioeconomic inequities faced by these groups. The American Medical Association, American Hospital Association and American Nurses Association have worked with congress

to draft a bill on COVID-19 race and ethnicity data collection. Equitable support for our minority neighbors throughout this public health crisis must incorporate a more inclusive public messaging strategy by the government - one that goes beyond internet media, and also uses minority spokespersons.

According to its priority list however, the CDC has made protecting health care personnel an "urgent focus". The recently reported on characteristics of health care personnel (HCP) infected by the virus. They note that occupational status was only available on 16% of case reports earlier this month. Of the 12 states with complete reporting on occupational status, HCP's accounted for 11% (1,689 of 15,194) of all reported cases. Among cases with additional HCP data reported, the majority of were female (73%), white (72%), and without a *reported* underlying health condition (62%). Only 15% of these cases were able to be laboratory-confirmed. About 90% were not associated with hospitalization though the median age of HCP patients was only 42 years; deaths were reported among 0.3%-0.6% of the cases.

With respect to "test-worthy" symptoms or comorbidity risks, the CDC's COVID-19 Screening App remains an informative public tool. Not yet on the app's list of symptoms however, are the increasingly reported COVID-19-associated rashes. The app can also function to track and trace users' symptoms but does not make this data publicly available. Alternatively, the open-source website, Covidnearyou.org, created by Harvard Medical School, Boston Children's Hospital and the University of Toronto, anonymously maps reported COVID-19 symptoms across North America, to help increase public awareness of local disease activity, prior to confirmed case reports.

Finally, with respect to disease outcomes, over 71,000 Americans have recovered from the virus. We mourn the deaths of 36,000 others, while noting that fatalities have slowed to a ten-day doubling rate. The city of New York alone now suffers from the 6th highest regional count of fatalities in the world, outranked only by the U.S. in totality, the three leading Mediterranean countries, and the United Kingdom. Nearby in New Jersey, further fatality concerns arise as nearly every long-term care facility in the state has reported a case of COVID-19. The national case fatality rate has risen to 5.29%, though still remains below the global average at this time. It is unclear as to what degree this reflects the nature of the virus, our social structures, our testing capabilities, or our medical response.

HERE IN WISCONSIN, **confirmed cases have had a slower rise to 4,500, dropping us to 26th amongst all states. The largest proportion of cases (1,654) come from the City of Milwaukee, around 50% of which are amongst black Americans, compared to 23% at the state level.**

Already, at least seven cases have been linked to the mandated in-person voting at the Wisconsin Primary election on April 7, with six cases in voters, and one in a poll worker. Another evolving outbreak is noted in the Green Bay area, attributed to a meat-processing plant. Most of the state's cases (62%) are in those aged 20-59, though at least 20 cases are noted in patients under age ten. The proportion attributed to health care workers remains unknown. LTC facilities are still under heavy surveillance, but no further publicly reported data are available on outbreaks beyond those known in Ozaukee and Washington counties, despite frequent public requests. Most recently, the Milwaukee House of Correction has reported an outbreak among at least 27 inmates and four staff members, necessitating National Guard deployment. Wisconsin fatalities total 231, and now double every ten days.

In terms of capacity, testing operations have surged to 7,890 daily tests across 32 labs. Over 120 contact tracers have also been added to the task force. The DHS states nonetheless that testing, laboratory and contact-tracing capacity remain insufficient as they look to re-open the economy in upcoming weeks, while continuing to trace effects of the in-person Wisconsin Primary election. Governor Evers has thus announced plans to greatly accelerate our testing capabilities with over 250,000 more test collection supplies in the coming weeks that will be administered and processed through partnerships with the National Guard, Exact Sciences, Epic Systems, Marshfield Clinic Health System, Promega, the State Laboratory of Hygiene, the Wisconsin Clinical Lab Network, the City of Milwaukee Public Health Lab, and the Marshfield Clinic Health System. In the meantime, the DHS continues to offer the public an online screening form, to assist providers with triaging their diagnostic process. Given current testing shortages, the DHS encourages those providers sending tests to Wisconsin's public testing laboratories to be aware of their caveats to the CDC's testing priorities; specific guidelines for LTC facility testing can be found here.

CONTAINMENT & SUPPRESSION STRATEGIES

GLOBALLY, **suppressive "lockdown" measures appear effective in flattening the second global upswing of COVID-19's infections. Many countries are preparing to switch their focus from suppression and containment, now to mitigation, in order to allow economic re-entry. But first, they must look to the cautionary tales hailing from East Asia.**

Further along in pandemic phases, Singapore, South Korea, Hong Kong, as well as Hubei in China and Haikado in Japan have already shifted their strategic focus from suppression to a mitigation, even though immunizations are not yet available. Successively, they all have reported a resurgence of cases, necessitating a return to stricter enforcement of social distancing. Singapore in particular was praised for its strong contact tracing program, believed to have alleviated its need for stronger social distancing measures. This notion was quashed as cases soon instigated from within a dormitory overrun with foreign workers. Seeing 1,000 new cases that a week, they introduced the COVID-19 (Temporary Measures) Act 2020 - effectively a what they now call a "Circuit Breaker" period, aiming to reduce the number of new infections. Even Taiwan with its miniscule caseload ended up tightening restrictions further when it noticed a rise of cases in March.

Most of these countries point to imported cases from China as the cause for their resurgence, leading to tightening of travel restrictions. Still, a region of Harbin in Russia who suffered the same resurgence after lifting lockdown measures points the finger at local spread. Epidemiologists warn that ramped up testing and contact tracing measures had created a false sense of security in all these instances, disincentivizing voluntary social distancing and thus continued disease suppression.

Among the European nations shifting to a mitigation focus are Germany (Europe's largest economy), as well as its neighbors, Denmark, Norway, Switzerland, Luxemburg, Austria, and Czech Republic. Most acknowledge that they have entered a challenging balancing act. Germany self-describes as having had "fragile interim success" and warns that the danger of new outbreaks remains high in the wake of the excitement to socialize. In Denmark, careful openings of schools and daycares in some places has even been met with public resistance, as parents do not want their children to be a governmental "experiment". With openings of smaller storefronts and public transport, many regions are mandating the use of facemasks. Sweden has been more liberal, leaving many of its gyms, cafes, bars and restaurants open through the pandemic, using only government encouragement to follow social distancing guidelines. Civil attitudes and well as confidence in the health care system appear to play a large role in how communities should be re-socialized.

NATIONALLY, **our caseload peak has evidence of flattening through social distancing, though the experience has varied regionally. Vocal right-wing partisans view this as the signal needed to "liberate" America and restart the economy. Many experts caution this interpretation though, seeing it as analogous to 'taking off the parachute, just because it slowed the rate of decent'.**

The fact is that the virus knows no borders and, without herd immunity in place (vis-à-vis immunizations), easing viral containment controls will ensure a second epidemic. Some physicians remind us that in the 'parachute analogy', those with healthier socioeconomics - and thus a higher chance of survival - are inadvertently unbuckling the parachute for the less healthy, marginalized groups, who are all-but-guaranteed injury from the drop. The wails of the sick and mourning, however, are becoming white noise; the President has now attuned his ear to the frustrated cries for "liberation" of socioeconomic freedoms.

The plight of more than 40 organizations including the AAFP notwithstanding, President Trump's social distancing guidelines are set to be lifted by May 1. The White House has announced a three-phase plan to re-open the economy, called "Opening Up America Again". Some states have already begun.

The plan has no set timelines and is to be rolled out at the discretion of local governors, who can determine if their region has met its "gating criteria" for commencement. These criteria include a two-week decline in both flu-like illnesses and confirmed COVID-19 cases, as well as demonstration of robust systems by which to test for infection and immunity within health care settings.

Once satisfied, regions can proceed to **Phase One**. This phase emphasizes strict shelter-in-place for the vulnerable, physical distancing by those in public

(limiting gatherings to ten people or less), as well as minimization of non-essential travel. Telework is to continue, with phasic return to work venues for employees, as necessary. Schools and other large venues, including bars, are to remain closed to the public. Senior living facilities and hospitals should prohibit visitation. Certain outpatient elective procedures may resume, however.

Phase Two can begin if the gating criteria continue to be met without rebound cases. Shelter-in-place for the vulnerable is still recommended. Public physical distancing is emphasized, and gatherings of more than 50 people are not recommended. Non-essential travel can resume. Telework is still encouraged. Schools can resume, as can other large venues including bars under physical distancing protocols. Visits to senior living facilities and hospitals are still prohibited, but elective surgeries can now take place on an inpatient basis.

If the gating criteria is once again met, **Phase Three** can ensue. In this phase, vulnerable individuals can resume public interaction, but with physical distancing and sanitary precautions in place. All staff may return to their places of employment. Visits to hospitals and senior care facilities may resume, though hygiene measures must be strictly observed. Large venues can operate under less strict physical distancing protocols.

In the meantime, the CDC intends to perform symptomatic surveillance in the general population, as well as asymptomatic sentinel surveillance in the most vulnerable populations: inner city, nursing homes, native American populations. Protections for black and Hispanic communities were not distinctly mentioned. Unlike earlier in the pandemic, we have yet to see state-by-state projections demonstrating an optimal intersection of health and economics. Vice President Mike Pence suggested that phase one is currently feasible in most places due to the simple fact that there is now "sufficient capacity of testing". Not all would agree.

Notably, a minority have followed the CDC recommendation to now wear cloth face coverings for public outings. Governor Cuomo in New York has already released an executive order mandating facemasks if in a public area where 6 feet of social distancing is not possible (i.e. the subway). The CDC has recently brought into question, however, whether the usual 6 feet and social distancing guidelines will be enough. One of their newer reports suggest that the virus may be able to spread 13 feet, particularly if someone sneezes.

Considering these concerns, altogether with the outcomes in East Asia, and even America's historic experience with viral pandemics such as the Spanish Flu, we must anticipate secondary infection peaks, and an eventual return to phase one or even phase zero of the federal socialization plan. In fact, resurgent waves of infection are predicted to last into 2022, requiring surveillance and intermittent or sustained social distancing, unless we are equipped to perform simultaneously aggressive contact tracing and quarantine, alongside administration of proven therapeutics and vaccines. Until then, "suppress and lift" may just become our new normal.

HERE IN WISCONSIN, **our Chief Medical Officer, Dr. Westergaard, assures residents that "Safer at Home" order is working. Governor Evers has extended the order until May 26, but notes "it is not a workable solution for our economy or our way of life in the long-term". The "Badger Bounce Back" is his administration's new economic re-entry plan.**

The plan first focuses on decreasing COVID-19 cases and deaths to a degree that 'liberates' the health care system, creating capacity to then support the phased reopening of businesses. The administration is busy establishing the necessary building blocks for this plan: increased lab capacity and testing; increased contact tracing and support for isolation and quarantine; increased COVID-19 surveillance measures; increased health care capacity; and increased supply of personal protective equipment. They will continue to use disease surveillance data to inform decisions about entering in different phases of business re-openings. The hope is to go "from boxing in Wisconsinites to boxing in COVID-19", all while preventing a second wave of infections.

MITIGATION STRATEGIES

REDUCING HEALTH CARE EXPOSURES

NATIONALLY**, telehealth has been a widely adopted mitigation strategy among our physicians.**

Undoubtedly there have been and will continue to be hiccups in its implementation. Billing is confusing, reimbursement is still wanting, and much of the legal provisions made are temporary. The fact is, however,

that regardless of economic re-entry, virtual medicine is here to stay. Physicians and practices must plan to integrate an appropriate mix of both in-person and virtual visits moving forward. We continue to look for ways to support you in this venture.

To this end, the AAFP COVID-19 Telehealth Guidance page continues to be an updated resource specifically tailored to our family physician members. The page also highlights the National Consortium of Telehealth Resource Centers: a federally funded program from the Office for Advancement of Telehealth that provides free assistance, education (including webinars) and information to organizations and individuals who are attempting to provide health care at a distance.

For eligible non-profit and public health care practices offering telehealth, applications for immediate funding support from the $200 million COVID-19 Telehealth Program (an initiative of the CARES Act) have been entrusted to the Federal Communications Commission for review. The funding reimburses "telecommunications services, information services, and devices necessary to provide critical connected care services until the program's funds have been expended or the COVID-19 pandemic has ended." So far, $6.94 million in funding has been delivered to 11 health care provider networks across eight states.

The CMS has also provided a 38-page FAQ document, covering telehealth and mobile health coverage under Medicare fee-for-service guidelines, though it does not account for provisions under the CARES Act. They also now have released "New and Expanded Flexibilities for Rural Health Clinics and Federally Qualified Health Centers" for the duration of the COVID-19 public health emergency.

PERSONAL PROTECTIVE EQUIPMENT

NATIONALLY, **PPE shortages remain a source of fear and frustration, particularly as we now know that around 11% of cases are attributed to health care personnel, and family physicians are among those with the highest professional risk. Diversions of supplies, not only from the Strategic National Stockpile (SNS), but from private purchases as well, have left states and organizations feeling helpless.**

It began with the White House reminding states to use their own stockpiles and find their own supply chains, because the SNS belonged to the Feds, to be used as a stop-gap buffer at their discretion, in places of greater need when adequate supplies were not immediately available. President Trump did increase supply chain availability by mobilizing private industries to produce goods that support this public health crisis under the Defense Production Act, however the Federal Emergency Management Agency (FEMA) then began bidding against the states for these supplies. Even at "bidding wars" where the feds weren't involved, governors of larger states like New York, California and Illinois were regrettably driving up prices as they competed and outbid smaller states for supplies. States are receiving few supplies at higher prices.

A new layer was then added to the frustrations: at a time where funds and resources are precious, the feds are being accused of seizing privately-purchased shipments on their way to delivery in certain states. There are open reports of this made by Colorado, and most recently also in Massachusetts, despite having the now 3rd highest caseload in the country. FEMA rebuts, suggesting instead that it may be an issue with suppliers who "cancel on a state contract in favor of [a] federal one."

While awaiting further supply, FEMA urged physicians to reuse PPE due to national shortages. CDC continues to provide guidelines on PPE use and endorses strategies to increase longevity of PPE until more supplies become available. Use of decontamination systems that allow mask sterilization and re-use are encourage, though these systems have not been heavily vetted. When purchasing supplies, organizations are encouraged to heavily vet that suppliers have adhered to NIOSH and NPPTL standards, as there are increasing reports of counterfeit products.

The website GetUsPPE.org has extensively surveyed health care facilities on PPE shortages. A breakdown of PPE shortages by type and by those states most heavily affected can be seen here. Notably, there are reports of medical staff being fired or threatened by speaking out against PPE shortages at their respective institutions.

HERE IN WISCONSIN, **hospitals and physicians continue to report shortages of PPE. The Evers Administration has state the SNS supplies will not come close to meeting our local needs, necessitating a search for sources beyond the federal government in order to protect health care personnel.**

Meanwhile, the state's COVID-19 PPE site remains active for supply donations (and requests). Notably, the Wisconsin Dental Association has generously donated 20,000 masks, 25,000 pairs of gloves and 1,700 gowns to hospitals. Further guidance on re-use of N95 respirators and optimization of PPE can be found here. Requests for additional PPE from the state's supply set aside from the SNS can be made here. Those not eligible are encouraged to contact their county emergency manager. The State Emergency Operations Center is operating under the Scarce PPE Allocation Decision Process.

Governor Evers also recently signed what he sees as a far-from-perfect bill aimed at ensuring the state will receive roughly $2 billion in federal aid from the CARES Act as a response to the pandemic. Some of the funding will be dedicated to PPE and other emergency medical supplies.

THERAPEUTIC PROTOCOLS

NATIONALLY**, protocols for milder cases of COVID-19 typically recommend following the CDC's stay at home approach. The oversight of quarantine will be a crucial component of mitigation strategies as the nation begins to re-socialize.**

Importantly, an expert panel of U.S. frontline physicians, as well as statisticians, and organizations such as the FDA, CDC and NIH have come together to develop a living document entitled COVID-19 Treatment Guidelines. The guidelines are based on published and preliminary data and will be updated alongside publication of any peer-reviewed or authoritative information. Treatments are categorized as either antivirals or host immunity-based therapies. Their recommendations begin with "[a]t present, no drug has been proven to be safe and effective for treating COVID-19."

For antivirals, the use of Chloroquine and Hydroxychloroquine are falling out of favor. Although their use from the SNS was encouraged by President Trump early on after FDA-authorization, the NIH and CDC have cautioned about their adverse effects. A new study of hospitalized veterans suggests that the use of Hydroxychloroquine worsens outcomes. The new guidelines recommend specifically against use of Hydroxychloroquine when combined with Azithromycin, as well as HIV protease inhibitors. Remdesovir, which remains limited to use for pregnant women and children, is now Phase III of clinical trials with cautiously optimistic preliminary results. Though not commented on, there are early reports of promise for use of Ivermectin.

For host-immunity based therapy, The National COVID-19 Convalescent Plasma Project, approved by the FDA to launch clinical trials, has been met with great reception. It allows plasma and antibodies from recovered COVID-19 patients to treat ongoing COVID-19 infections and is being widely tested across the country. Hyperimmune globulin trials are also underway, as are those in monoclonal antibody studies against IL-6, and IL-1 inhibitors. The new guidelines recommend against the use of interferons and Janus Kinase inhibitors.

HERE IN WISCONSIN, **UW School of Medicine and Public Health and UW Health continue their work as clinical trial sites for the COVID-19 Convalescent Plasma Project, under the leadership of the Mayo Clinic.**

HEALTH CARE FACILITY SHORTAGES

NATIONALLY, the IHME noted a peak hospital resource use on April 17, with over 68,000 beds and over 18,000 ICU beds needed that day. The country has again "flattened" the predicted peak with its suppression and mitigation efforts, compared to the original predications.

HERE IN WISCONSIN, **there are currently around 350 hospitalizations associated with COVID-19; 40% of beds remain available. Peak bed use was 425 on April 11 – a timeline closely predicted by the IHME. Nonetheless, increasing health care capacity is one of the tenets for the state's economic re-entry plan.**

ELIMINATION & ERADICATION STRATEGIES

NATIONALLY, **we are far from having FDA-approved medications or vaccines for the prophylaxis of COVID-19. For this reason, suppression strategies are crucial in reducing infection rates until elimination of the virus is possible; mitigation strategies will likely not be enough to prevent further outbreaks.**

The investigational vaccine called mRNA-1273 is still in phase one of human clinical trials; their first available data is likely another month away. They are hoping it will received an FDA emergency use authorization for some patients and health care personnel in the fall. Inovio has begun their vaccine's phase one trials at Penn State.

Johnson & Johnson aim to have more than half a billion coronavirus vaccines ready early next year, but their phase one trials will not start until September 2020. Should this or similar vaccine efforts prove ineffective, resurgent waves of infection are predicted to last into 2022.

WORKFORCE STRENGTHENING

FAMILY MEDICINE TRAINEES

With the AAMC strongly suggesting medical students not be involved in direct patient care, many rotations have been cancelled, leaving medical students an underutilized contingent of the health care workforce. The AAMC has offered further recommendations to medical colleges as they govern alternative supporting roles by medical students, as has the AMA. The Liaison Committee on Medical Education released guidelines for early graduation of medical students to the frontlines of the COVID-19 pandemic. The ACGME released a statement highlighting serious ramifications of early graduation such as CMS reimbursements and legalities of their internship contracts.

The ACGME has also released considerations on resident physician training during the COVID-19 pandemic; furloughing of residents has been deemed unacceptable. The AMA has released guiding principles to protect residents responding COVID-19. Finally, to the relief of many residents, the ABFM has been able to secure some July testing dates, after the initial April test dates had been cancelled.

VOLUNTEERS, RETIREES & LICENSING

With existing and anticipated physician shortages in relation to surging caseload, quarantine, and even fatalities, swift measures have been taken to expand and strengthen our workforce. To assist and expedite physician recruitment, many states have waived licensing fees and accelerated license reactivation. The Federation of State Medical Boards provides a list of state-specific physician licensing permissions, with links to local guidance documents. The Interstate Medical Licensure Compact website also helps physician navigate voluntary, expedited pathway to licensure to allow them to practice in other states.

The American Medical Association has released a Senior Physician Resource Guide to consider for their involvement in the COVID-19 pandemic. The AAFP has also released guidance documents for retired physician volunteers, as well for those physicians practicing outside of usual settings. The CDC has also provided a guide on "mitigating staff shortages" during the COVID-19 pandemic.

HERE IN WISCONSIN, **Governor Evers is asking active and retired health care professionals to sign up on the Wisconsin Emergency Assistance Volunteer Registry (WEAVR) portal to serve in either clinical or non-clinical support positions in hospitals and clinics, in order to increase health care capacity.**

RESILIENCY SUPPORT

NATIONALLY, the COVID-19 crisis effects on both illness and "moral injury" are expediting the U.S. Department of Health and Human Services' predicted shortage of up to 90,000 physicians by the year 2025. We recognize that in itself, physician burnout is its own public health crisis that necessitates urgent action and leadership by health care institutions, government and other regulatory medical bodies and insurers.

As representatives of the AAFP, we continue to search for ways we can support you and advocate for your needs, to strengthen your resilience throughout the pandemic and in the quickly changing future of family medicine. We would like to highlight the Academy's Physician's Health First website, offering a well-being self-check, general tips on self-care, and on how to get crisis help. An archive of the free webinar entitled "Maintaining the Emotional Health of You, Your Team, and Your Patients" is also available, as well as CME credit for completing the course Physician Well-being in the Time of the Pandemic". Childcare resources for physicians are also provided.

In the meantime, numerous lists of resiliency tools have been updated for physicians working in the COVID-19 public health crisis. A non-exhaustive set of lists can be found on websites from the CDC, the Academy of Medicine, the Substance Abuse and Mental Health Services Administration, among others.

To speak with a provider directly, both Talkspace and Headspace apps offer free services, as does Project

Parachute by Eleos. The Physician Support Line has also emerged as a new resource in the COVID-19 pandemic. It has been developed specifically for physicians, by physicians, and is staffed by volunteer psychiatrists.

HERE IN WISCONSIN, t**he Resilient Wisconsin website, hosted by the DHS, offers tools and instructional videos to help the public and providers stay resilient during COVID-19. The Center for Healthy Minds at the UW-Madison also offers a free "Healthy Minds Program" on its app, to support well-being during the pandemic, as well as an online well-being toolkit. Finally, the WAFP maintains its focus on healthy practice, and offers specific links and resources for physician wellness.**

FINANCIAL SUPPORT

NATIONALLY, **the Small Business Administration announced that the $349 billion Payment Protection Program (PPP) funds from the CARES Act, as well as the Economic Injury Disaster Loan Emergency Advance were exhausted in under two weeks.**

However, with the senate looking to pass the new Paycheck Protection Program and Health Care Enhancement Act, more funds are likely to be added to the tune of $484 billion. The new bill would replenish another $310 billion for PPP and promises $60 billion for the U.S. Small Business Administration's Economic Injury Disaster Loan Program, which includes $10 billion in emergency grants for businesses. Additionally, on April 13, the HHS opened its portal for provider relief payments, the eligibility for which can be found here.

Meanwhile, though audio-only telehealth visits are now receiving better reimbursement, the Academy along with other bodies, such as the AMA, are continuing to advocate for parity to in-person visits. The AAFP continues to make available its webpage on Financial Relief for Family Physicians, with a breakdown of available funding opportunities and tools to help keep your practice financially viable. We are happy to announce the establishment of a new AAFP Foundation COVID-19 Emergency Relief Fund for family physicians as well, which "will be used to improve FPs' ability to continue providing safe, high-quality care to patients during the pandemic and into the future." Based on shared experiences from physicians, we anticipate that much of this funding will go to assisting in the use of telehealth.

HERE IN WISCONSIN, **the new COVID-19 Response Legislation signed by Governor Evers promises additional funding support for the health care system locally, though seems to be directed more towards hospital systems.**

Questions? Comments? Email mprentice@mcw.edu