NEVER PEDESTRIAN

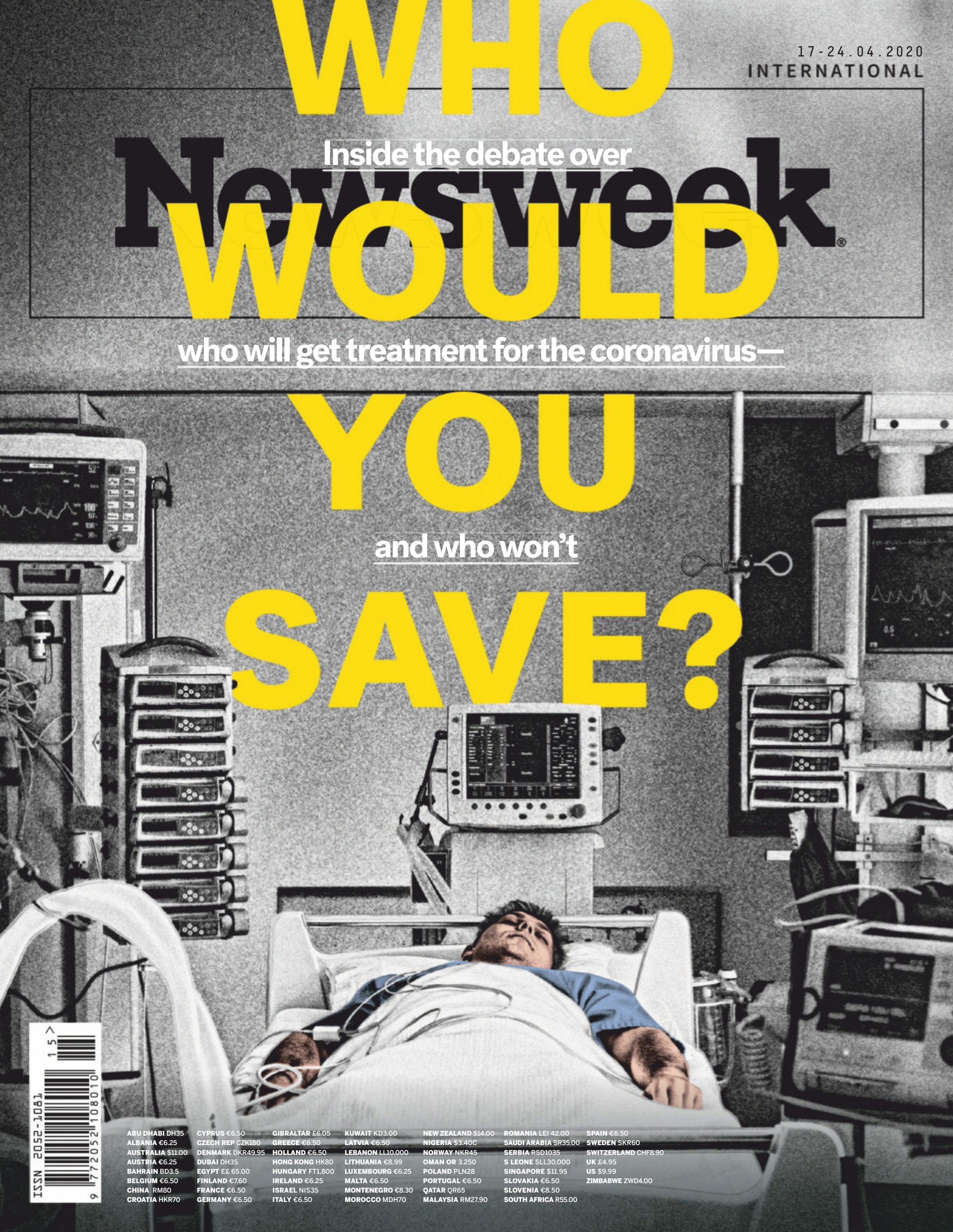
harrysoflondon.com

17-24.04.2020
INTERNATIONAL

Newsweek®

WHO WOULD YOU SAVE?

Inside the debate over who will get treatment for the coronavirus—and who won't



ISSN 2052-1081

ABU DHABI DH35
ALBANIA €6.25
AUSTRALIA $11.00
AUSTRIA €6.25
BAHRAIN BD3.5
BELGIUM €6.50
CHINA RM80
CROATIA HKR70
CYPRUS €6.50
CZECH REP CZK180
DENMARK DKR49.95
DUBAI DH35
EGYPT E£ 65.00
FINLAND €7.60
FRANCE €6.50
GERMANY €6.50
GIBRALTAR £6.05
GREECE €6.50
HOLLAND €6.50
HONG KONG HK80
HUNGARY FT1,800
IRELAND €6.25
ISRAEL NIS35
ITALY €6.50
KUWAIT KD3.00
LATVIA €6.50
LEBANON LL10,000
LITHUANIA €8.99
LUXEMBOURG €6.25
MALTA €6.50
MONTENEGRO €8.30
MOROCCO MDH70
NEW ZEALAND $14.00
NIGERIA $3.40C
NORWAY NKR45
OMAN OR 3.250
POLAND PLN28
PORTUGAL €6.50
QATAR QR65
MALAYSIA RM27.90
ROMANIA LEI 42.00
SAUDI ARABIA SR35.00
SERBIA RSD1035
S LEONE SLL30,000
SINGAPORE $11.95
SLOVAKIA €6.50
SLOVENIA €8.50
SOUTH AFRICA R55.00
SPAIN €6.50
SWEDEN SKR60
SWITZERLAND CHF8.90
UK £4.95
US $9.99
ZIMBABWE ZWD4.00

ORLANE

PARIS

EXTRAORDINAIRE.
YOUTH IS BACK.

firmer skin
97%

wrinkles fade
88%

moisturized skin
97%

radiant skin
97%

* Results from self-evaluation tests on 40 women after 28 days.

PATENTED

Available at neimanmarcus.com and bergdorfgoodman.com

CSA IMAGES/GETTY

FEATURES

LOSING COUNT
Political polls and projections are often presented as if they were the products of some dispassionate science. In reality, there is good deal of art and no small amount of uncertainty in how many of them are actually conducted.

COVER CREDIT
Photo illustration by **Gluekit** for *Newsweek*; source by Martin Barraud/Getty

For more headlines, go to
NEWSWEEK.COM

Newsweek

INTERNATIONAL EDITION

APRIL 17 - 24, 2020 _ VOL.174 _ NO.11

P.42

FIRST WOMAN Uzo Aduba plays Representative Shirley Chisholm in a mini-series about the fight to ratify the Equal Rights Amendment

DEPARTMENTS

NEWSWEEK (ISSN2052-1081), is published weekly except one week in January, February, March, April, May, June, July, August, September, October, November and December due to combined issues.
Newsweek International is published by Newsweek Magazine LLC, 25 Canada Square, Canary Wharf, London E14 5LQ, UK. Printed by Quad/Graphics Europe Sp z o.o., Wyszkow, Poland
For Article Reprints, Permissions and Licensing **Newsweeklicensing.com**

GLOBAL EDITOR-IN-CHIEF _ **Nancy Cooper**
DEPUTY EDITOR-IN-CHIEF _ **Diane Harris**
CREATIVE DIRECTOR **Michael Goesele**
EDITORIAL DIRECTOR **Hank Gilman**
DIGITAL DIRECTOR **Laura Davis**
US NEWS DIRECTOR **Juliana Pignataro**
MANAGING EDITOR **Melissa Jewsbury**
SPECIAL PROJECTS EDITOR **Fred Guterl**

EDITORIAL

Senior Editors **Tufayel Ahmed, Peter Carbonara, Erika Hobbs, Meredith Wolf Schizer**
Deputy Editors **Jennifer Doherty, Christopher Groux** (Gaming), **Matt Keeley** (Night), **Scott McDonald** (Sports), **Donica Phifer, Christina Zhao**
Associate Editors **David Chiu, James Etherington-Smith, Hannah Osborne** (Science), **Dom Passantino**
London Sub-Editor **Hannah Partos**
Copy Chief **Elizabeth Rhodes Ernst**
Contributing Editor, Opinion **Lee Habeeb**
Editorial Assistant **Emmy Espinal**

CREATIVE

Director of Photography **Diane Rice**
Contributing Art Director **Michael Bessire**
Associate Art Director **Paul Naughton**
Digital Imaging Specialist **Katy Lyness**
Art Assistant **Elizaveta Galkina**

WRITERS

Steven Asarch, David Brennan, Nina Burleigh, Dan Cancian, Brendan Cole, Shane Croucher, Chantal Da Silva, Benjamin Fearnow, Jenni Fink, Kashmira Gander, Ari Georgiou, Alexandra Hutzler, James LaPorta, Jason Lemon, Phil Martinez, Noah Miller, Tom O'Connor, Ewan Palmer, Bill Powell, Asher Stockler, Ramsey Touchberry, Marc Vargas, Andrew Whalen, Janice Williams, Kelly Wynne

VIDEO

Video Production Manager **Jessica Durham**
Bangalore Video News Editor **Nandini Krishnamoorthy**
Video Producer **Zoe Jones**

PUBLISHED BY
Newsweek LLC

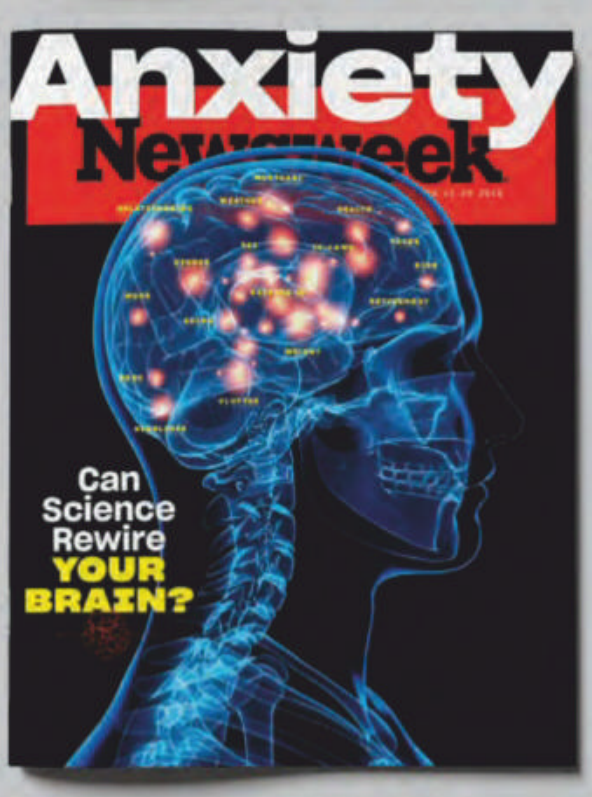
Chief Executive Officer **Dev Pragad**
Chief Content Officer **Dayan Candappa**
Chief Operating Officer **Alvaro Palacios**
General Manager EMEA / SVP Finance **Amit Shah**
Chief Technology Officer **Michael Lukac**
General Counsel **Rosie Mckimmie**
VP, HR Business Partner **Leiann Kaytmaz**
VP Ad Sales, North America **Shaun Hekking**
Director, Content Strategy **Nalin Kaul**
Deputy News Director + Senior Digital Strategist **Adam Silvers**
Global Executive Producer **Alfred Joyner**
Global Head of Programmatic+Partnerships **Jeremy Makin**
SVP, Product + Business Intelligence **Luciano Costa**
Senior Sales Director **Chantal Mamboury**
Head of Subscription Operations **Samantha Rhodes**
Newsstand Manager **Kim Sermon**

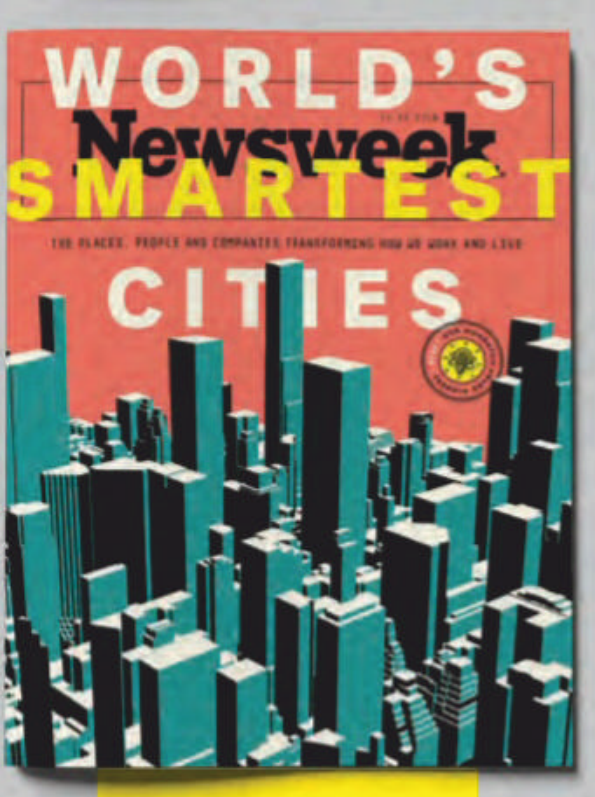
FROM TOP: TARRAS79/GETTY; EMMA MCINTYRE/CONTOUR/GETTY

★★★★★

“Journalism I don’t see elsewhere until later, if at all.”

NEWSWEEK.COM/TRY





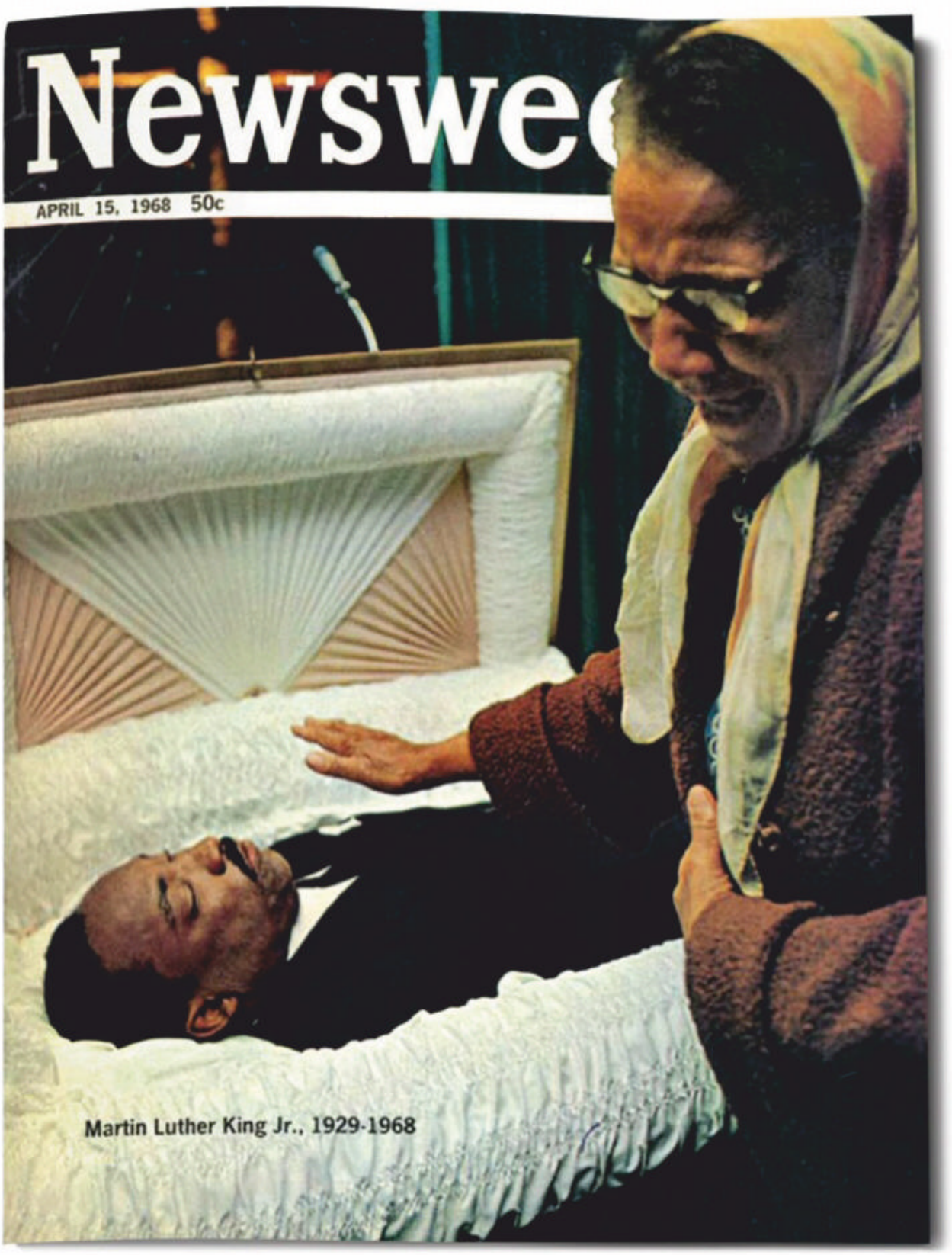
SAVE 57%

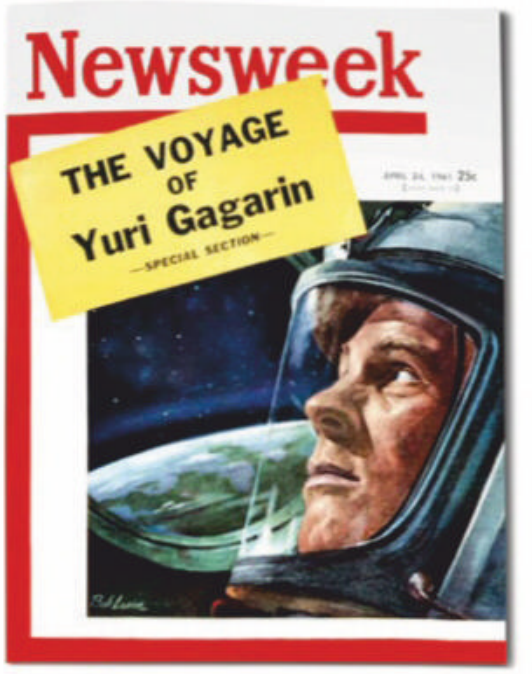
Subscribe

FROM €2.11 PER WEEK

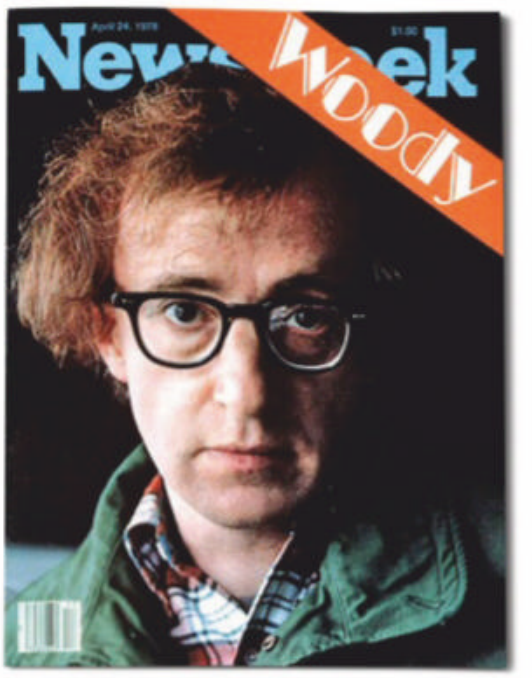
The Archives

1968 *Newsweek* reported that tragedy struck: "a white assassin shot and killed Dr. Martin Luther King Jr. in Memphis." The country was shocked and responded with a national period of mourning and with outrage that led to riots and with the expedited passing of the Fair Housing Act, considered to be the last Civil Rights-era legislation. *Newsweek* said of Dr. King, "He was, more than any single man, the voice and the instrument of the second American revolution." Dr. King would be 91 years old, if he were alive today.





1961 A Russian, Yuri Alekseyevich Gagarin, "took mankind's first, triumphant step into space," wrote *Newsweek*. This "epochal achievement" was surrounded by "secrecy, rumor, and the struggles of nation against nation." Currently, two Americans and one Russian astronaut are aboard the International Space Station.



1978 Woody Allen's movie *Annie Hall* swept the Oscars and took home four awards, said *Newsweek*. In his career, Allen has won four statues and been nominated for 20 others. His memoir, *Apropos of Nothing*, was set to release this month, but it was dropped by his American publisher after a public backlash about accusations of sexual assault against him.

CLOCKWISE FROM LEFT: BURK UZZLE/MAGNUM; BOB LAVIN; HAROLD KRIEGER

FOR ALL THE MOMENTS WE STAND UP

Since 2008, *Major League Baseball*® has supported Stand Up To Cancer in its mission to fund groundbreaking research and get treatments to patients faster than ever before. Join us as we stand united to show our support for loved ones affected by cancer.

Visit **StandUpToCancer.org/MLB**

CANDICE PATTON
Stand Up To Cancer Ambassador

STAND UP TO CANCER®

Stand Up To Cancer is a division of the Entertainment Industry Foundation (EIF), a 501(c)(3) charitable organization.

Major League Baseball trademarks and copyrights are used with permission of Major League Baseball. Visit MLB.com

Photo By
ANDREW ECCLES

In Focus _ THE NEWS IN PICTURES

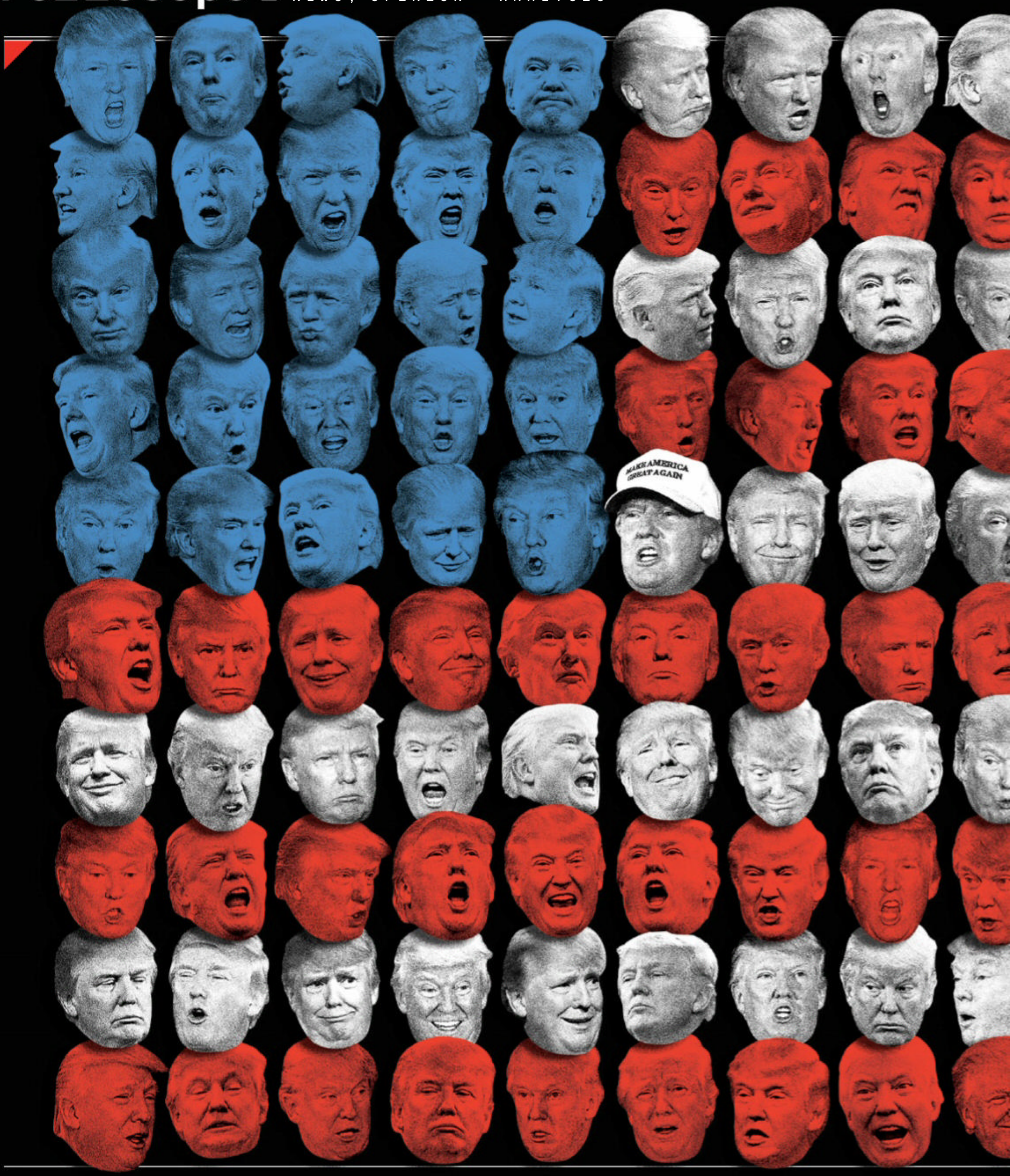
DIMITRIOS KAMBOURIS/GETTY

WEEHAWKEN, NEW JERSEY

Floating Comfort

The Naval ship USNS *Comfort* travels up the Hudson River on March 30 to Pier 90 in New York City, where it docked to provide 1,000 hospital beds for non-coronavirus patients. New York state is the epicenter of the pandemic in the United States with 102,863 confirmed cases and 2,935 deaths as of April 3.

DIMITRIOS KAMBOURIS


MAKE AMERICA
GREAT AGAIN

TOP RIGHT: JONDPATTO/GETTY

"The federal military response is a patchwork. »P.12

CAMPAIGN 2020

The Coronavirus Campaign

President Trump had planned to build his re-election ad strategy on a strong economy. The pandemic has thrown that playbook out the window

THIS TRUMP CAMPAIGN AD IS A THROWBACK to a time that's hard to remember now. Entitled "The Fighter," it features African American and Latino voters extolling the healthy U.S. economy created by President Donald Trump. "Look at our economy, look what he's done. How could you not support the president?" asks an African American woman wearing a red MAGA hat.

The ad encapsulated what the Trump campaign strategy was going to do: emphasize low unemployment, rising wages and a strong stock market. It was also an effort to increase support for Trump among minority voters—a tack the campaign telegraphed in its Super Bowl ad touting criminal justice reform.

Team Trump believed a bump in the African American vote from the 8 percent he got in 2016 to even the low teens in 2020 would turn what might otherwise be a close race into an electoral rout. The overall theme, campaign manager Brad Parscale said, was obvious for a president presiding over peace and prosperity: "Nothing says 'winning' like President Donald Trump and his stellar record of accomplishment for all Americans."

But now, 2020 is the coronavirus election. How Trump handles the crisis— and how he is perceived to be handling the crisis—will likely determine whether he is re- elected. Campaign manager Parscale says that $1 billion had been earmarked for broadcast and digital advertising this year. That number, campaign officials say, has not changed—a far cry from the shoestring operation of 2016.

What's changed almost overnight is the type of ads the campaign now plans to run. One has already been edited, titled "Commander in Chief," which portrays Trump as a wartime president providing what campaign spokesman Andrew Clark calls "calm, steady leadership at a time of crisis." It features black-and-white shots of Trump and his coronavirus task force advisers in the situation room as a voice-over praises his "decisive leadership." Another ad shows Joe Biden calling Trump's decision to ban travel to China, "xenophobic."

"That decision, experts say, saved thousands of American lives," the voice-over intones.

Neither has run yet. The president, since the start of his daily COVID-19 briefings, has seen his job approval ratings jump. A Gallup poll released March 24 showed 49 percent of those surveyed approve of Trump's overall performance, the highest rating of his presidency. Fully 60 percent

BY

BILL POWELL

Photo illustrations by RYAN OLBRYSH

said they approve of Trump's handling of the crisis. For now, Trump's daily coronavirus briefings are attracting a huge number of viewers: 12.2 million cable viewers watched on Monday, March 23—a huge number for cable—while millions more watched on the major broadcast networks.

As the crisis unfolds, Trump is getting, in the parlance of campaigns, vast amounts of "earned media," and as long as he's getting it, the campaign believes it can husband its ads ("paid media") until viewership for the briefings begins to decline. The campaign also believes that the image of Trump holding forth from the White House contrasts to their benefit with the talks Biden has been giving from the basement of his house in Delaware. "They're laughably pathetic," says one Trump campaign official not authorized to speak on the record.

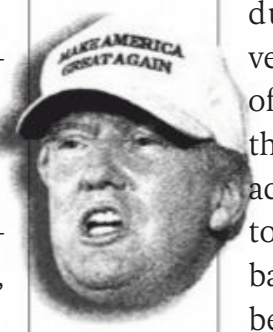
This moment in a redefined campaign will pass soon. The debate inside Trump's campaign is whether and to what extent to run the numerous negative ads it has or is planning, versus the positive "Commander in Chief" motif, for which the campaign plans several more spots. The theme of the negative ads is straightforward: Biden is not up to the job, particularly not now, in the midst of a crisis.

An ad released March 12 opens with Biden stammering on the stump—"we can only win this re-election, excuse me, we can only re-elect Donald Trump"—and ends with an announcer saying, "It takes a tough guy to change Washington. It takes Donald Trump." Another spot will likely repurpose an ad released last year which mocked the Democratic presidential candidates for raising their hands when asked if their health care plans would insure undocumented immigrants. The new ad will zoom in on Biden as he meekly raises his hand as well.

It's likely, though as yet undecided, that Trump will authorize the release of more negative ads sooner rather than later—because Democratic super PACs are unloading on him and his handling of coronavirus. Priorities USA is in the midst of a $6 million ad blitz in key swing states hammering Trump on his early downplaying of the virus. They've gotten Trump's attention: on March 26th, his campaign threatened to sue local TV stations that are running it, saying it makes the false claim that Trump called the virus a "hoax."

Campaign officials routinely mock Biden for what he has said about how he would handle the virus, arguing that much of what he has proposed, Trump has already done. "Biden's plan is radical, recycled and too late," says spokesman Clark, and that message is likely soon to be made into an ad.

As the virus infects more people over the next couple of months, the Democratic super PACs' attacks on Trump's early handling of the crisis will intensify. The Trump campaign will produce more targeted ads, particularly aimed at swing districts in swing states, reiterating that he moved quickly to cut off travel from China, when the Democrats and the national press were obsessed about impeaching Trump over Ukraine. "That feels like a different century now," says a high-ranking White House political adviser not authorized to speak on the record. "But you bet we're going to remind people of it."



"What's changed almost overnight is the type of ads the campaign now plans to run."

The Trump campaign is using a firm staffed with alumni from the controversial Cambridge Analytica. That's the data-mining company that during the last election cycle harvested the personal data of millions of people's Facebook profiles without their consent and used it for political advertising purposes. The firm seeks to target ads and marketing efforts based on an individual's "motivational behavioral triggers," as company President Matt Oczkowski has put it.

If the coronavirus crisis eases sometime before the election, look for the Trump campaign to target Biden in the Midwestern battleground states that the president won last time but in which Biden is thought to be strong this cycle. The issue on which Team Trump believes he's vulnerable: China. Biden has made a string of statements during this campaign downplaying the competitive threat from China. Given that the virus evolved there, Biden's soft-on-China stance looks problematic for him. Depending on how the pandemic progresses, Team Trump will likely spin up a couple of ads portraying Biden as Beijing's dupe.

But campaign officials stress: coronavirus' course will dictate campaign strategy—including advertising and marketing. "We made all sorts of plans last year on what we would do this year [on the campaign]. A lot of good that did us."

The Trump campaign hopes that by the fall it can run ads touting the Commander in Chief's success in handling the crisis, while hitting Biden on traditional issues like immigration, trade and health care. Maybe they'll resurface the ad with the African American lady in a MAGA hat. Will they be in a position to do that? "Your guess is as good as mine," says the White House political adviser.

THE ELEPHANT SANCTUARY IN TENNESSEE™

POWERED BY PUBLIC FOUNDATION

HOME & HERD

Providing sanctuary for more than 20 years

LEARN MORE at www.elephants.com

READY A member of the Army National Guard at the Javits Convention Center in New York City. Opposite: U.S. Army North commander Lt. Gen. Laura Richardson

PENTAGON

Gearing Up

The pandemic is a U.S. national emergency and the military has activated its never-before-used domestic contingency plans

WHILE BEING HIT WITH coronavirus at rates equivalent to the civilian population, the U.S. military has activated its "defense support of civil authorities" apparatus, establishing liaisons in all 50 states, activating units and command posts, and moving forces to provide medical, transportation, logistics, and communications support in New York and Washington states.

Lieutenant Gen. Laura Richardson, the commander of Army North (ARNORTH), has received approval for the deployment of ground units in response to the now declared national emergency. The moves begin to implement two existing contingency plans—CONPLAN 3400 for "homeland defense" and CONPLAN 3500 for "defense support of civil authorities"—as well as numerous new orders specifically relating to coronavirus. Fourteen states have also appointed "dual-status commanders," presidentially approved National Guard officers who serve in both state and federal chains of command, with another 20 states to follow.

The Pentagon announced that the first dual-status commanders had been appointed in California, Colorado, Massachussetts, Maryland, New York, Oklahoma, South Carolina and Washington

"The role of the dual-status commander is that he works for two different principals through two different chains of command," says Army Major General Giselle Wilz, head of the National Guard Bureau's strategic plans and policy directorate. The commanders will report to Richardson as well as the governors of each state, except Hawaii. That commander reports to the U.S. Army Pacific (USAPARC), an organization of U.S. Indo-Pacific Command responsible for Hawaii and the Pacific territories.

The federal military response, never before activated nationwide, is a patchwork of complex organizational schemes. While General Richardson is the commander of the Joint Forces Land Component Command of U.S. Northern Command for all federal (and dual-status) ground troops in the continental U.S. and Alaska, USAPARC is in charge of the Pacific, reporting to NORTHCOM just as General Richardson does. As "maritime" assets, two hospital ships—the USNS Comfort and the USNS Mercy, now in New York and Los Angeles—are under a separate command, the Navy's Fleet Forces Command, which also serves

BY

WILLIAM M. ARKIN

@warkin

FROM LEFT: ANGUS MORDANT/BLOOMBERG/GETTY; STAFF SGT. MARK TORRES/US ARMY

as Naval Forces North (NAVNORTH) and the Joint Forces Maritime Component Commander for North America. Still another command, Marine Forces North (MARFORNORTH) operates side-by-side with ARNORTH, in charge of Marine Corps troops.

Army North has deployed approximately 1,100 active duty service members assigned to specific units. They began moving to New York and Washington states immediately after they were assigned. The active duty units deployed include:

→ Joint Task Force-Civil Support Headquarters, Fort Eustis, Virginia
→ 3rd Expeditionary Sustainment Command, Fort Bragg, North Carolina
→ 4th Sustainment Brigade, 4th Infantry Division, Fort Carson, Colorado
→ 63rd Expeditionary Signal Battalion, Fort Stewart, Georgia

Joint Task Force-Civil Support was established in 1999 as the domestic response authority in case of an attack involving weapons of mass destruction—chemical, biological, radiological and nuclear (CBRN). According to its website, "when directed, JTF-CS will deploy to an incident site, establish command and control of Department of Defense forces, and provide military assistance and support to civil authorities by saving lives, preventing further injury and providing temporary critical support to enable community recovery."

Its secondary mission is "all-hazards" response. The Joint Task Force , "could be directed to respond to a natural or man-made disaster if asked to do so by U.S. Northern Command."

On March 28, General Richardson also announced that four U.S. Army Reserve Units would be called to active duty to support the federal response:

→ Task Force 76 Headquarters, formed by the 76th Operational Response Command, Salt Lake City
→ 377th Theater Sustainment Command Headquarters, New Orleans.
→ 4th Expeditionary Sustainment Command Headquarters, San Antonio
→ 505th Military Intelligence Brigade Headquarters, San Antonio

To align with the 10 FEMA regions responsible for emergency management, Army North has also activated its 10 Defense Coordinating Offices, senior colonels who are embedded with each regional command center. These are specialized planning cells, that serve as military liaison to coordinate federal assistance. Another 100 Emergency Preparedness Liaison Officers are also now active, augmenting the Defense Coordination cells.

In announcing the activation and movement of forces Army North was careful to specify none of the units will "directly participate in civilian law enforcement activities."

Similarly, Air Force Major General Joseph Lengyel, chief of the National Guard Bureau and a member of the Joint Chiefs of Staff, said: "I'm hearing unfounded rumors about National Guard troops supporting a nationwide quarantine. Let me be clear: There has been no such discussion."

Because of so many rumors on social media, the Pentagon has set up a website to beat down stories of military-imposed quarantines and martial law. It also said it would limit releaase of operational details and numbers of coronavirus cases.

"Unit level readiness data for key military forces is information that is classified as a risk to operational security and could jeopardize operations and/or deterrence," Alyssa Farah, the Pentagon's press secretary, told *Military Times* on March 26.

As of March 31 the Defense Department reported 1,204 confirmed active cases of coronavirus: 673 servicemembers, 247 civilians working for the military, 212 family members and 72 contractors.

Activated units have begun moving to New York and Washington states.

NEWSMAKERS

Talking Points

"One thing I think the coronavirus crisis has already proved is that there really is such a thing as society."

—BORIS JOHNSON

VOGUE

"I'm realizing life is really short. You don't have a lot of time to tolerate s–t, you know?"

—RIHANNA

"I GET THE SENSE PEOPLE ARE EATING A LOT MORE ICE CREAM THAN USUAL."

—Andrew Yang

Andrew Yang

AARP

"THE SECRET OF GOOD COMMUNICATION? SCREAMING HELPS."

—PHIL DONAHUE

Phil Donahue

CNN

"I believe it will happen that we may start seeing a turnaround, but we haven't seen it yet."

—DR. ANTHONY FAUCI

RADIO.COM

"Don't give me the MyPillow guy doing a song-and-dance up here on a Monday afternoon when people are dying in Queens."

—SPORTS RADIO HOST MIKE FRANCESA

LATE NIGHT SETH MEYERS

"MORE PEOPLE THAN EVER ARE PLAYING SCRABBLE RIGHT NOW BUT IT SURE AS HELL ISN'T BECAUSE SCRABBLE IS FUN."

—Seth Meyers

Rihanna

FROM LEFT: NATHAN CONGLETON/NBCU PHOTO BANK/NBCUNIVERSAL/GETTY; DIMITRIOS KAMBOURIS/BERGDORF GOODMAN/GETTY; PRESTON EHRLER/SOPA IMAGES/LIGHTROCKET/GETTY

POWERED BY
PUBLIC
FOUNDATION

Violence is an epidemic.

What if there was a cure?

As a critical response to violence and injustice, a worldwide campaign is introducing the reality of nonviolence to billions of people. Real stories. Real change.

Discover more at **nonviolencenow.org**

nonviolence now

WHO WILL DOCTOR

Hospitals are preparing for the unthinkable: **Rationing treatment** in the emergency room. How

by

FRED GUTERL

Illustration by

RYAN OLBRYSH

will they decide who lives and who dies?

S SAVE?

As the toll of the coronavirus pandemic rises, Americans confront with increasing distress the idea of rationing health care. Choosing to deny care to people in desperate need is anathema; it feels unAmerican, even. But it happens all the time: when Congress allocates money for Medicare and Medicaid; when insurance companies reject claims; when the Trump administration decides to shut down the Federal marketplace for the Affordable Care Act.

Rationing is also what happens when governments whittle down their budgets for preparing for deadly pandemics, as they did over the last decade. That goes some way to explaining why the U.S. now has the steepest trajectory of COVID-19 cases of any nation so far, including China and Italy, and is experiencing a critical-care crisis in hospitals across the land. As the first wave of the SARS-CoV-2 outbreak begins to crest over the nation during April and early May, it is sending patients in respiratory distress to hospitals en masse, where many of them may die for lack of treatment.

The problem is how to keep these patients alive long enough for their immune systems to ward off the disease. That too-often requires intubating them with a breathing tube attached to a ventilator, which pumps oxygen into the lungs in rhythm with a patient's natural breathing, for as long as two weeks. As intensive care wards fill up with patients needing ventilators, hospitals expect to see a shortfall. U.S. hospitals have about 160,000 ventilators, according to an analysis in the New England Journal of Medicine, plus another 8,900 in the Strategic National Stockpile. COVID-19 will hospitalize 2.4 million to 21 million people in the U.S., 10 to 25 percent of whom will need to be put on ventilators, the Centers for Disease Control and Prevention estimates. For each ventilator, as many as 31 patients would be waiting in line. In the best case scenario, 10 ventilators will be available for every 14 patients. Since those are averages, hard-hit areas may be worse off.

How will doctors decide at the moment of crisis who lives and who dies?

Bioethicists are hammering out procedures and protocols as the crisis develops in an effort to help doctors make fair and compassionate decisions. Everyone agrees that race, religion, wealth and disability should not matter when it comes to doling out care. But what factors should matter? Should youth take priority over old age? Parents over grandparents? Single mothers over deadbeat dads?

"The reality is, we already have a very unfair allocation of health care resources," says Dr. Robert Truog, a critical-care pediatrician and bioethicist at Harvard. "If you're poor and uninsured, you already don't get the kind of health care you need. But that happens under the radar. The striking thing about ventilators is that it can be an immediate life-and-death decision. If someone can't breathe, you have a limited window to save their life. If you need it and you don't get it, you're going to die."

The doctors trying to bring some order and fairness to these life-and-death decisions have got a lot working against them. State guidelines vary widely and aren't always followed. The health care system is fragmented and largely run on a just-in-time, highly-competitive basis that maximizes efficiency but leaves little wiggle room for a crisis. Will the haves get better emergency care than the have-nots? Will big donors to hospitals, and patients with the best lawyers, jump to the head of the line, while the uninsured are left to die?

This is the burden that falls on the shoulders of the nation's doctors and health care workers who are now scrambling to save lives.

Rationing in a New Guise

Americans have some direct experience with rationing. When it comes to replacement organs, states defer to the United Network for Organ Sharing (UNOS), a non-profit, which conducts the affair in a more or less fair and orderly way. UNOS stipulates that recipients must be good medical candidates for a replacement organ and in a position to receive an organ as soon as one becomes available. Wealthy people like Apple founder Steve Jobs, who can hop on a private plane and show up anywhere in the nation in short order, may have some advantage over candidates who have to take the bus, but this particular kind of inequity generally stays out of the headlines.

Unlike organ donation, rationing during COVID-19 affects potentially the entire population in particularly dramatic fashion. It is unprecedented in the lifetimes of today's doctors and hospitals—not since World War II and the 1918 influenza pandemic, when hospitals were overwhelmed with patients in respiratory distress, have doctors faced crisis rationing of this magnitude. Like most aspects of the

FROM TOP: MASTER SGT. CHRISTOPHER SCHEPERS/U.S. AIR NATIONAL GUARD; WEINTRAUB/MPI/GETTY; BRENT STIRTON/GETTY

ALL HANDS
Not since World War II and the 1918 flu, when hospitals were inundated, have doctors faced crisis rationing on this scale. Top to bottom: The Maryland Air National Guard loads medical supplies from the Strategic National Stockpile; medics administer a transfusion in France in June 1944; and rescue workers in California hand out food to the homeless.

18+

WHAT IS AVAXHOME?

AVAXHOME-

the biggest Internet portal, providing you various content: brand new books, trending movies, fresh magazines, hot games, recent software, latest music releases.

Unlimited satisfaction one low price
Cheap constant access to piping hot media
Protect your downloadings from Big brother
Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages
Brand new content
One site

AVXLIVE.ICU

AvaxHome - Your End Place

We have everything for all of your needs. Just open https://avxlive.icu

"Never in my lifetime have we had anything like this. You have to go back to **World War II** to see the kinds of decisions that are being made right now."

U.S. health care system, protocols for how to handle this emergency are inconsistent or non-existent.

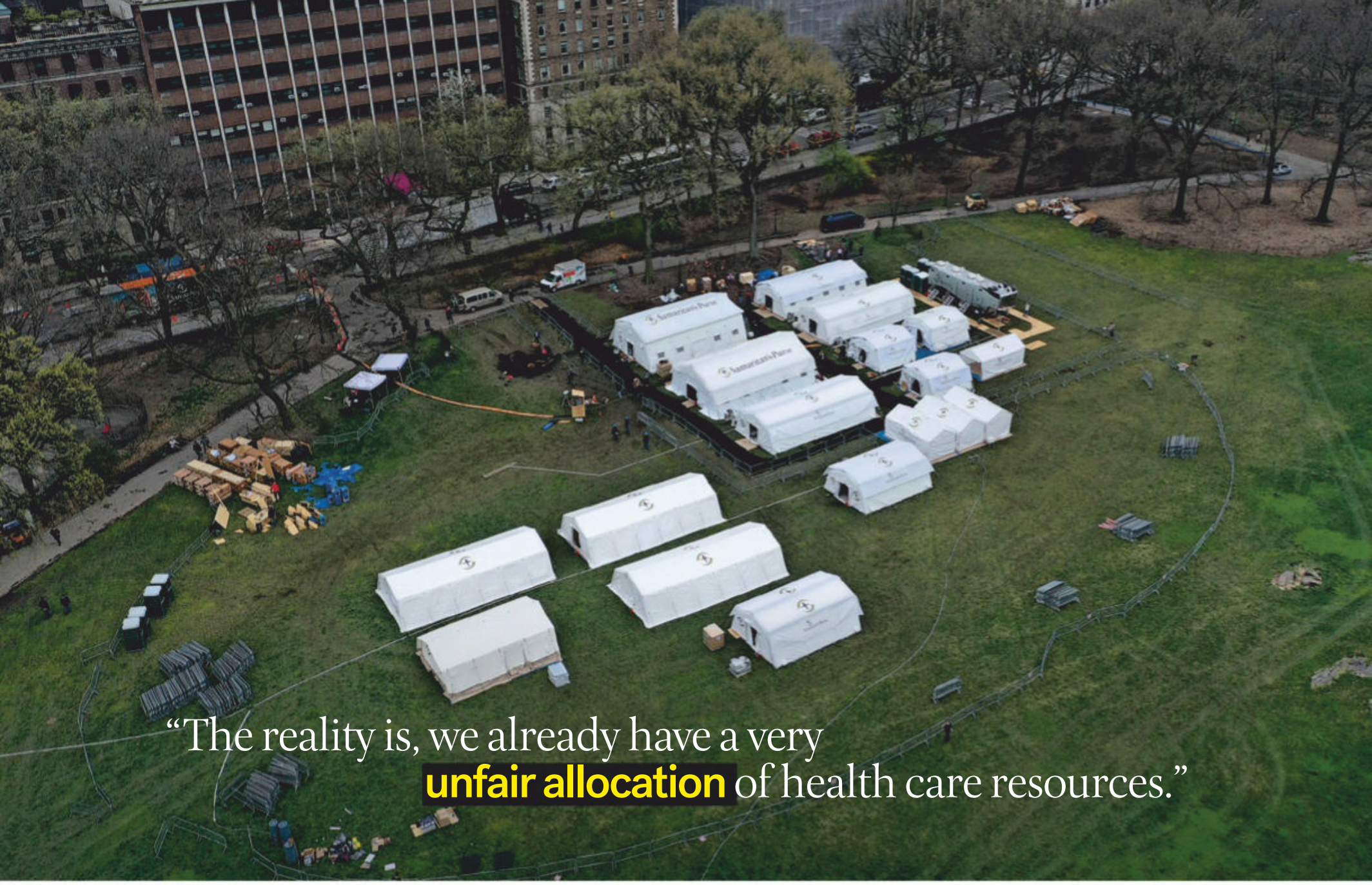
State guidelines for "crisis standards of care," which are meant to help when ERs are inundated and resources are short, vary widely from one state to another. Some states have policies that exclude certain types of patients from receiving critical care in a crisis, which some bioethicists believe are discriminatory. "Many states have policies that exclude whole groups of patients," says Dr. Douglas White, director of the Program on Ethics and Decision Making in Critical Illness at the University of Pittsburgh Medical Center. For instance, Alabama was recently criticized for guidelines that call for excluding patients with severe mental retardation. "Tennessee, Kansas, South Carolina, Indiana—they all have laws containing exclusion criteria," he says.

States that don't have exclusion policies use standards that many bioethicists consider unfair. The main goal in New York state's policy guidelines, for instance, is to maximize the number of lives saved. That means a 90-year-old patient would get the same priority as a 20-year-old patient, assuming they both have an equal chance of survival. "This runs against the moral intuitions of many people," says White.

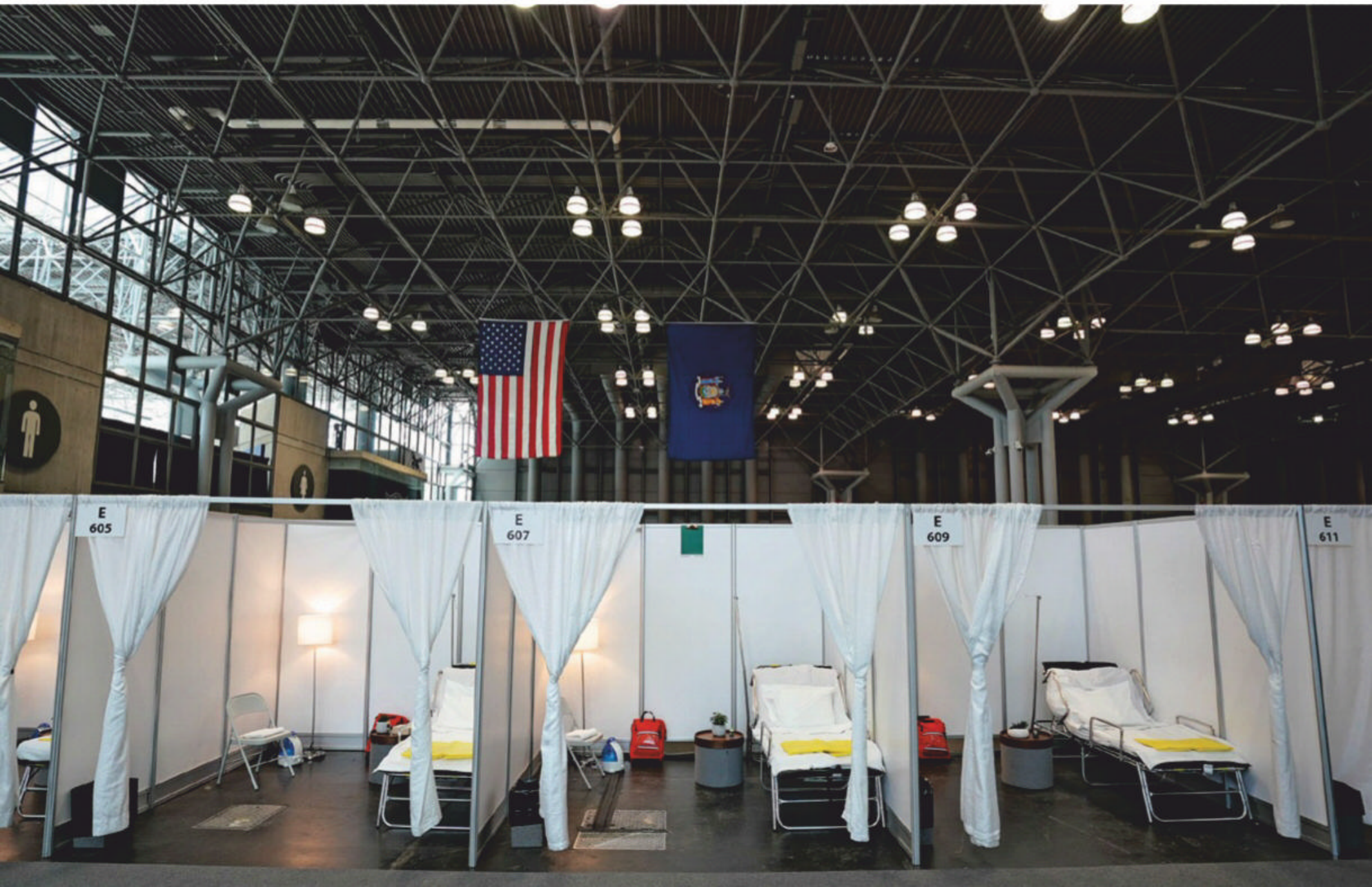
White and some colleagues have worked out a set of critical-care protocols intended to ensure that resources in a crisis are allocated in a fair and non-discriminatory way. Rather than using exclusion criteria, it combines four principles to generate a score.

The two primary principles are saving the most lives and saving the most "life years," which tips the scales to the benefit of younger patients. A secondary principle, used in the event of a tie, gives priority to health care workers, broadly construed to be individuals who are essential to the disaster response and put themselves at risk. Another secondary principle is "life cycle" status, another tip to youth. Pennsylvania recently adopted the protocol for its 300 hospitals, and White says Kaiser, Med Star and other large health care providers are considering them as well.

These Pittsburgh protocols, as they're called, embody an idea that most bioethicists agree on: that bedside doctors should not make the life-or-death decisions about who gets a scarce ventilator and who does not. It's hard enough for clinicians to save their patients' lives under trying circumstances; they should be free to advocate for the patients without the burden of having to weigh whether



"The reality is, we already have a very **unfair allocation** of health care resources."



they're worthy of care. That job should go to an independent group of clinicians who are blind to the patient's race or religious background and whether they're disabled, homeless or a major hospital donor. "The people making the triage decisions should not even have access to that information," says Dr. Matthew Wynia, director of the Center for Bioethics and Humanities at the University of Colorado.

Having independent teams make the tough calls is not only fairer, it's good medicine, says Wynia. The teams have better "situational awareness" of the resources available in nearby hospitals, which can affect decisions about what to do with individual patients. "God forbid someone makes a tragic choice to allocate a resource to one person and the other ends up dying, and then three days later you realize there was another hospital six miles away where we could have transferred them," he says.

Crisis in Practice

BIOETHICISTS ARE HAMMERING OUT THESE protocols, and trying to persuade states and hospitals to adopt them, in the midst of the crisis. But much of the thinking has been done over decades of academic study and debate, punctuated by the occasional infectious-disease outbreak—the 2009 pandemic flu, the SARS outbreak of 2002, and so forth. Each new outbreak gives public-health officials a shudder of fear that a catastrophe, on the order of the 1918 flu, which killed tens of millions of people, is at hand. Now that the catastrophe has arrived, we will find out what actually transpires in emergency rooms.

It's difficult to know at this early stage. For all the anticipation by experts, the current crisis is unprecedented in living memory. "Never in my lifetime have we had anything like this," says Wynia. "You have to go back to World War II to see the kinds of decisions that are being made right now."

The lack of preparation is palpable. Many hospitals do not seem to have established clear protocols for ER doctors to follow. Instead, they seem to be leaving these decisions to discretion of the bedside doctor. New York, where most hospitals have canceled elective surgery and are devoting their resources to the influx of COVID-19 patients, is expected to fall more than 9,000 ventilators short of demand, according to data compiled by the Institute for Health Metrics and Evaluation, a non-profit. Several hospitals in New York City have given their blessing to doctors who elect not to resuscitate COVID-19 patients, the *Washington Post* reports. NYU Langone Medical Center reminded doctors in an email to "think more critically" about allocating ventilators and that it supports doctors' decisions to "withhold futile intubation," as reported in the *Wall Street Journal*. In a statement, NYU Langone said the policy had been put in place before the COVID-19 outbreak and that its policies are in line with New York state guidelines.

At the moment, hospitals are scrambling to avoid having to make military-style triage decisions. Ventilators aren't the only resource that's short. The blood supply is low because people aren't going out to donate. Staffing is not up to the levels that would be needed in a full-scale crisis, especially for workers qualified to operate ventilators and other equipment in intensive-care units. "These are not machines that you just plug someone into and walk away," says Wynia. "They need to be managed all day long by ICU-level staff. Even if we had another 50,000 ventilators to send around the country, we don't have people to run them, and 50,000 may not be nearly enough."

As of the beginning of April, Mount Sinai Hospital Health System, which operates eight hospitals in the New York City area, was scrambling to assemble a response to a rapid influx of patients. New York state, according to IHME projections, was expected to hit peak demand for hospital beds over the first two weeks of April, ahead of most of the rest of the nation. Dr.

TESTING STARTS
Experts have warned of a deadly pandemic for decades. Now that the catastrophe has arrived, emergency rooms are being put to the test. Many hospitals do not seem to have established clear protocols for ER doctors to follow. Instead, they seem to be leaving these decisions to the discretion of the bedside doctor. Clockwise from above: People line up to be tested at Elmhurst Hospital in New York City; a 1000-bed temporary hospital in the Jacob K. Javits Center will treat COVID-19 patients; and an emergency field hospital is built in Central Park.

CLOCKWISE FROM BOTTOM LEFT: BRYAN R. SMITH/AFP/GETTY; LOKMAN VURAL ELIBOL/ANADOLU AGENCY/GETTY; EDUARDO MUNOZ ALVAREZ/GETTY

HUMAN RESOURCES
Hospitals are scrambling to assemble a response to the rapid influx of patients. Some are making makeshift ventilators out of machines used to treat sleep apnea and anesthesia machines now sitting idle in operating rooms. Below: Doctors at St. Barnabas Hospital in New York City test staff for COVID-19 in makeshift tents. Right: U.S. Navy sailors transport the first patient to the hospital ship *Mercy*, which is accepting non-COVID-19 patients in Los Angeles.

Brendan Carr, chair of emergency medicine at Mount Sinai, says the hospital was adapting BiPAP machines, used for treating sleep apnea, to work as substitute ventilators in a pinch. (BiPAP stands for Bilevel Positive Airway Pressure.) Like ventilators, BiPAP machines force air down a patient's throat, but rather than deliver the oxygen in a tube, they use a mask that fits over the patient's mouth. "It's not crazy to think that those can be converted into something that can work through a different mechanism, through a different tube," says Carr. In addition, he said, anesthesia machines now sitting idle in operating rooms, due to the postponement of elective surgery, could also be repurposed.

Doctors can also put two patients on one ventilator. During the Las Vegas shooting in 2017, for instance, doctors used this technique to cope with the sudden influx of shooting victims. It requires paralyzing both patients, however, and using the ventilator on a setting that forces air down the breathing tube. For this reason, doctors are loathe to try this on COVID patients, which typically have to stay intubated for a week or two while their immune systems fight off infection. In that time, the muscles around the lungs atrophy, leaving the patients unable to breathe on their own.

Eventually, equipment manufacturers and inventors will step into the breach and "close the delta"—the gap between the supply of ventilators and demand. "We look at the delta and, of course, we're really scared," he says. "But it's amazing the way that people are stepping up to try and invent and create ways to change that gap. It might miss the peak in New York City, but it might catch the backend of the peak."

To handle the staffing shortage, Mount Sinai has reorganized its critical-care staff to incorporate doctors who don't typically work in emergency care. It is putting experienced critical-care doctors, who under ordinary circumstances would manage a few dozen ICU patients, in charge of supervising doctors and other staff who are being called up to work in the ICU.

How would doctors at Mount Sinai handle the difficult choice of, say, having to pull a patient off a ventilator to make it available for another patient deemed to have a better chance of survival? Carr says there's no hospital-wide policy to guide the actions of the doctor in charge. "How will we handle it, if and when it comes? It's a good question," he says. "There are lots of folks who in the abstract can talk about it. If you're a health system right now, are you going to create a protocol around this? How do you think it would be received if you did?"

Instead of using protocols, Carr says, the hospital will rely on patients and their families, in consultation with the bedside doctor, to come to an agreement voluntarily. "If and when we get down to a very low number of ventilators for our health system, would it make sense to just have a protocol in place that makes us the decision maker?" he says. "Or might it make more sense to say to families of loved ones who've been on the ventilator for 10 days that are not progressing, 'Hey, we're in a critical place right now. I want you to know that we have 300 people ventilated in our hospital system and there are more patients coming in. We would like to have thoughtful ongoing conversations about the direction that your loved one is going.'"

Legal Snafus

A WILD CARD IS HOW A LITIGIOUS SOCIETY WILL respond when patients are denied care. In the absence of clear protocols, doctors and hospitals run the risk of legal challenges that could gum up the

FROM LEFT: MISHA FRIEDMAN/GETTY; U.S. NAVY/GETTY

"If a doctor is engaged in good-faith compliance with standards, they should be **immune** from prosecution."

works. "We think the risk to physicians is low, but not zero, and not trivial," says Glenn Cohen, a law professor and bioethics expert at Harvard Law School.

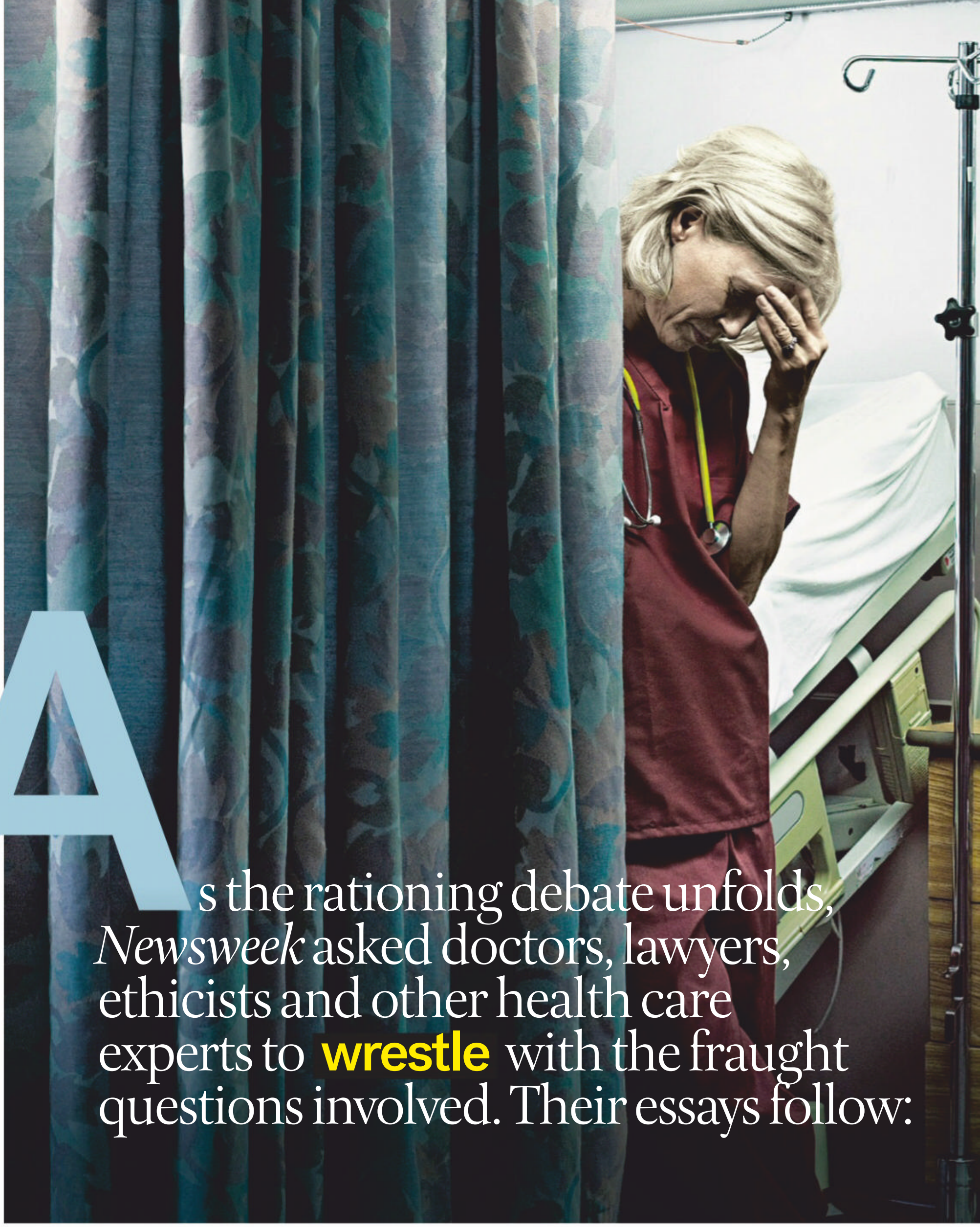
The act of taking a patient off a ventilator is, legally speaking, fraught. Criminal law generally doesn't hold doctors responsible for not providing care if they don't have the resources, but taking a patient off a ventilator without their consent is a different matter. "It looks on paper like homicide," he says. "It doesn't matter if the patient would have died anyway. Case law says that shortening a life even by a few hours could lead to charges of manslaughter or murder."

In a crisis, Cohen doesn't believe prosecutors would pursue such cases against doctors. But it would be up to the individual prosecutor. How many doctors know who their local attorney general is? On the civil side, doctors could be sued for malpractice, but the risk that a jury would award damages are low, he says. If a doctor wanted to take a patient off a ventilator, a patient's family could seek an injunction from a judge, bringing the process to a halt.

Although federal statutes grant some immunities for health care workers, they're not adequate. Only Maryland provides adequate protection. Cohen would like to see state legislatures provide temporary protection for doctors for the duration of the crisis. In the interim, state district attorneys and attorneys general should write letters pledging not to prosecute doctors if they abide protocols such as those developed in Pittsburgh. "If a doctor is engaged in good-faith compliance with standards, they should be immune from prosecution," he says.

The crisis in critical care that U.S. hospitals are now dealing with reminds Truog of his experience in Haiti after the earthquake in 2010. He saw children with severe pneumonia, who needed ventilation. But hospitals didn't have enough of the devices to go around, so doctors had to make difficult choices. "This was part of daily life for Haitians," he recalls. "It seemed like a necessity. We felt we were doing the best we could."

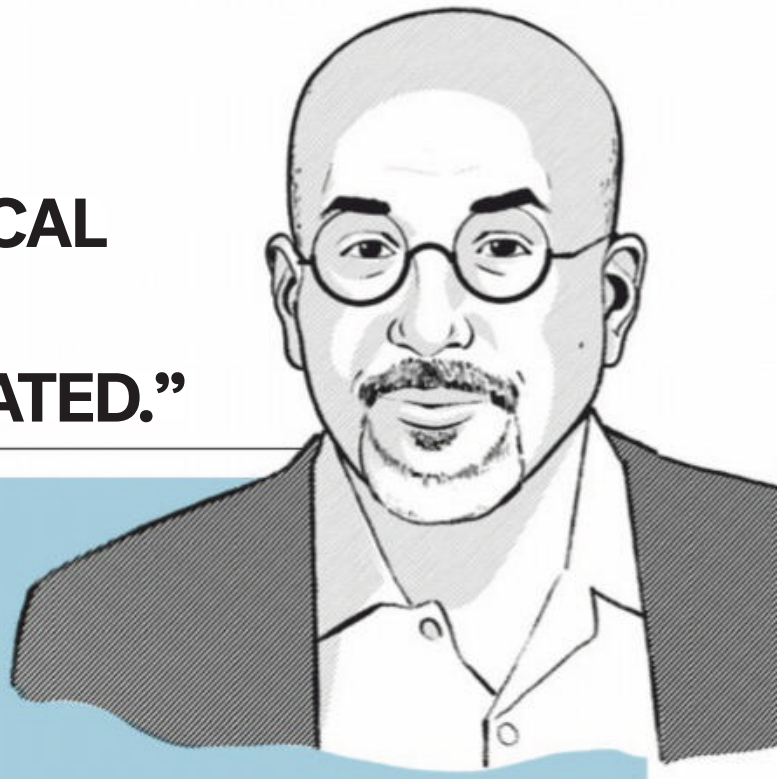
What he finds striking, in retrospect, is how ordinary rationing critical health care seemed in one of the poorest nations on earth. "I think it will be a lot harder for Americans."



As the rationing debate unfolds, *Newsweek* asked doctors, lawyers, ethicists and other health care experts to **wrestle** with the fraught questions involved. Their essays follow:


IMAGE SOURCE/GETTY

"THE PSYCHOLOGICAL TOLL SHOULD NOT BE UNDERESTIMATED."



Doctors are used to trying everything to save their patients. Families count on it. There will be a heavy price to pay when we withhold that care.

by **SADATH A. SAYEED**

THE COVID-19 PANDEMIC HAS rapidly and radically disrupted any sense of normality in all aspects of medical practice in the United States. Rationing life-saving care is not something American doctors are accustomed to consciously considering in our daily working lives, let alone ever communicating it to patients or their families. At most, we are taught a little about it, typically in school, as a part of a formal course in medical ethics.

At Harvard Medical School, where I have taught hundreds of students just such a curriculum for well over a decade, we spend a few hours on the subject in a classroom setting in their first year. In my experience, consensus rarely emerges, but many students settle most comfortably with some manner of utilitarian thinking—in the abstract, it intuitively makes sense that we ought to maximize the number of lives saved in a crisis.

But the moral distance is immense between academic discussions and actually caring for sick people with names, faces and life stories. As soon as we are done, as students, discussing neatly constructed ethical arguments, we become residents, fellows and attending physicians, and we learn to singularly prioritize the breathing, speaking person in front of us.

We are quickly indoctrinated into the rule of rescue: Save each patient with all means available. And, up until now in our country, the means have, by and large, been readily available. We have not needed to build up the psychological fortitude to confront genuinely life-threatening scarcity.

Conversations about death in an intensive care setting typically occur after we have exhausted all our therapeutic options. In my own practice, as a neonatal critical care specialist, there are times when we know that our baby patients are in the dying process despite our ongoing efforts to keep them alive. It usually isn't an abrupt change in clinical condition or some unexpected catastrophe that convinces us, but rather a relentless smoldering over days, weeks and sometimes even months. Artificially breathing for our patients, supplying powerful drugs to keep their hearts pumping and providing energy cocktails of sugar, protein and fat intravenously are not enough

Portrait illustrations by ALEX FINE

to stave off the inevitable. We might buy more time continuing our interventions, but the writing is on the wall.

When this clinical suspicion registers loudly enough, we feel more urgency to have the hardest conversations with parents. They need to at least hear, if not right away accept, that it is more likely than not that their baby will not survive—despite us trying everything in our bag of therapeutics to save their child.

That last bit is the key for our own sanity and to maintaining trust with our patients: that we have indeed tried everything.

We are fortunate that most parents eventually come to terms with our clinical conclusion once it has been introduced. They are rarely naïve to what we are observing, even as they hold on to every last ounce of hope. Under the best of circumstances, our last few hours or days together are spent trying to allow for a dignified death that our little patient's families can live with, heartbreaking as it invariably will be. In my experience, most parents are grateful that their baby was given an honest chance at life in our hands.

I dare say in my NICU, utility rarely, if ever, enters our bedside ethical calculus.

The current pandemic demands that we doctors refashion ourselves in deeply uncomfortable robes. As an educator of medical students and postgraduate trainees, I am certain that most of my younger charges identify with Captain Kirk much more than Mr. Spock. Nor are most socially Darwinian by nature.

Our bioethicist friends are trying to soften the blow, recognizing our vulnerability to the rescue obsession. They recommend that these life- or death rationing decisions must be made before the patient ever meets our gaze—that institutional committees informed by rigorous ethical analysis dictate allocation protocols that best approximate what will be the "least-worst" set of outcomes.

> "The families of these forsaken patients will have been **wronged,** period—no matter how crisply a philosophical argument might suggest otherwise."

I am sure this is wise in the long run. We need to admit that no rationing system of life-saving therapy is capable of satisfying all stakeholders, but a haphazard and opaque approach will devastate an essential social trust privileged almost exclusively to our profession. We must do our best to balance fairness and efficiency while ensuring transparency.

And yet, I still worry this exercise in applied ethics, while desperately important, can only do so much moral work. Yes, if all goes well, more lives will be saved in the end without grotesque, across-the-board discrimination against the feeble or aged. And, since every life is meant to have equal worth, the more saved, the better. Nevertheless, I also cannot help feel that a crucial part of our humanity will be chipped away each and every time such decisions are actually made.

We will not just suffer deep emotional trauma that might scar us for the remainder of our professional and personal lives, but also violate something basic to the calling of the healing professions. It may not be sacred, but I am not embarrassed to

LUIS ALVAREZ/GETTY

call it spiritual. These consequences count too.

Even if doctors and nurses are not making the call on who gets a ventilator, we will be the ones tasked to deliver inferior, if not straight away palliative, care. We will be the ones pronouncing our patients dead. It will be our faces, voices, arms and legs, not those of ethicists, hospital administrators or public health officials, that physically failed to provide them with an optimal chance at rescue.

There is no distancing us from the horror. The psychological toll on us should not be underestimated.

The families of these forsaken patients will not be grateful to us, nor should they be. They will have been wronged, period—no matter how crisply a philosophical argument might suggest otherwise. The psychological toll on them should not be underestimated.

So, during these days of reckoning, my humble plea is threefold: One, let's not discount this gravest of harms by sweeping it under the procedural cover of sterilized hospital protocols. Two, let's not be dismissive of the devastation to patients and their families who are passed over for the sake of prioritizing some human values over others. Lastly, let's take more than a mindful moment each time it happens to communally cry and curse out loud, and then further pause to recall that neither cool rationality nor dispassionate reason are all or even most of what actually makes us decent, caring health professionals.

I fear that if we do not, we will all be the lesser for it.

→ **Sadath A. Sayeed, J.D., M.D.,** *is assistant professor of global health and social medicine at Harvard Medical School. The views expressed in this article are the writer's own.*

THIS IS WHAT HAPPENS WHEN WE FAVOR INDIVIDUAL CARE OVER PUBLIC HEALTH

The U.S. spends twice as much as other developed nations on health care but very little goes to preparing for emergencies and other measures for the common good. We have to fix that.

by **ELIZABETH H. BRADLEY**

As Americans watch dire predictions of 100,000 to 240,000 deaths in the United States materialize around us, those who have studied this country's health care system see the causes of the catastrophe as rooted in decades of policy decisions that prioritize medical care for individuals at the expense of public health.

The US has more critical care beds per capita than any other industrialized country and about 20 mechanical ventilators per 100,000 people, and it still may not be enough. Most comparative studies of the US health care system with those of other Organisation for Economic Cooperation and Development (OECD) countries conclude that Americans enjoy far better access to most high-tech medicine, including MRIs, CT scans and many kinds of diagnostic imaging than most people in the world.

The cost of this system with relatively easy access (at least for those who have health insurance) is well-documented: The United States spends about twice as much per capita on health care as the average among other OECD nations. But in the face of the COVID-19 pandemic, it is not enough? That is hard to accept. Many have lamented the country's lackluster performance in health outcomes. For a high-income country, the US suffers unusually high rates of maternal mortality, infant mortality, obesity, diabetes, heart disease, chronic lung disease, HIV/AIDS, disability—the list goes on. But one place where the system has excelled is in the provision of high-tech intensive care.

Yet, here we are, with each day's news carrying more terrifying stories about the potential of rationing the use of ICU beds and ventilators, while COVID-19 cases overwhelm existing hospital resources.

The great fear is that many of the 100,000 to 240,000 deaths predicted by the scientific advisers to the White House Coronavirus Task Force will result from the health care system being overwhelmed and unable to respond effectively to those in need. If that's the case, frontline physicians, nurses and administrators will be left with the immediate decisions about how to apportion the scarce medical resources—ICU

beds, ventilators and personnel. They will be making life-and-death choices, asked to guide us through enormous ethical dilemmas, patient after patient.

But the ethical issues are not just at the bedside. Underlying these agonizing frontline decisions are policy decisions about how health care resources are allocated in the United States. Such policy decisions are made far from the patient, family and care team. They are made in Congress, at the Centers for Medicare & Medicaid Services, in executive offices of health systems and insurance companies, at state capitols, in Medicaid offices and in employer's employee benefit offices throughout the country.

Time and time again, US health policy decisions have prioritized medical care over public health systems and emergency preparedness, leaving us woefully unprepared to deal with emerging and re-emerging infectious disease threats now on the rise due to a host of forces, including climate change, rapid population growth, urbanization, increased global travel and rising antibiotic resistance. What COVID-19 is telling us is that our choice—often hidden but nonetheless revealing of our ethics—to underinvest in public health is now going to cost us in terms of economic instability, tragic choices and lives lost.

The approximately $275 per person per year (2.5 percent of all health care spending) we spend on public health is not enough—not enough to have timely, universal testing for emerging infections; standardized protocols for coordinated data collection and contact tracing to quickly and accurately identify early exposures to infected individuals; and clear, consistent public messaging about risks and prevention strategies to maintain the public's health in the face of outbreaks. In addition to the overall inadequacy of funding, it is unevenly distributed, with large geographical differences in availability of labs, testing sites and experienced public health professionals.

> "COVID-19 is telling us our choice to **underinvest** in public health is now going to cost us in terms of tragic choices and lives lost."

The needed public health investments are practical. First, we need the brightest and most creative minds in communications and social media to provide a constant flow of engaging information about health risks and opportunities, tailored to different ages and needs. Second, we need the capability to quickly scale up diagnostic testing, ideally home testing, and public health laboratories to make universal and regular testing feasible. And last, we need coordinated data collection and analysis resources to enable timely and accurate contact tracing and follow up to contain outbreaks at their source.

We can do better. But it requires a change in mindset. The tragic, ethical choices at the bedside are not isolated events. They are the culmination of many upstream decisions resulting in underfunding crucial public health and emergency preparedness efforts—these, too, were life-and-death decisions, albeit less visible. How many lives, how many trillions of dollars will it take to reorder our priorities?

→ **Elizabeth H. Bradley** *is president of Vassar College and a professor of political science as well as science, technology and society. A global health care scholar, Bradley is also the former director of the Yale Global Health Leadership Institute and co-author of* THE AMERICAN HEALTH CARE PARADOX: WHY SPENDING MORE IS GETTING US LESS. *The views expressed in this article are the writer's own.*

WILL RATIONING LEAD TO A SURGE IN LAWSUITS AGAINST DOCTORS?

The last thing we need in the middle of a pandemic is for health care providers to worry about being sued. Here's what we should do to protect them.

by **R. ALTA CHARO**

IN CITIES AROUND THE country, the COVID-19 pandemic has moved hospitals from conventional care to crisis care, forcing choices upon us that no one wants to make, and changing the standard of care we have long taken for granted. Triage in a time of crisis must combine hard-headed, evidence-based policies with public understanding and support—even when individual cases tear at our hearts.

It goes without saying that every effort should be made to relieve scarcity, by bringing in more beds, equipment and personnel. Contingency standards of care can be used to provide the usual services in non-conventional ways, such as reusing or sharing some forms of equipment.

At some point, however, this will not be enough. Once a hospital has arrived at the moment when there simply are not enough beds or ventilators, the usual standard of care yields to a "crisis standard of care" (CSC), defined by the National Academy of Medicine as a substantial change in the level of care it is possible to deliver, brought about by a formally declared disaster. The CSC relaxes the usual medical standards for clinical care, and shifts focus from individual patients to the patient population as a whole, until the situation eases. Response times might get a little longer to allow health care providers to put on protective gear, for example, or some kind of monitoring might become intermittent rather than continuous. .

Under circumstances like these, the last thing we need is for doctors and nurses and other providers to fear being sued for negligence when their care no longer meets the standard that applies under normal conditions.

Negligence—or, as in this context, medical malpractice—is determined primarily by whether a provider met the standard of care. The triage necessitated by a crisis may look like negligence, because it diverges so dramatically from ordinary standards. In an ideal world, the existence of a crisis situation would make it abundantly clear that the standard has changed, and that actions like delaying or forgoing tests and procedures would not constitute malpractice.

Indeed, if a suit were brought as a result of a crisis standard of care, the provider likely could win. But the very fact of being sued, regardless of the outcome months or years later, is expensive, distressing and a source of fear.

A number of mechanisms exist to protect providers and other key players from liability when they are acting within the parameters of a crisis standard of care. The Federal Public Readiness and Emergency Preparedness (PREP) Act immunizes the U.S. government, manufacturers, pharmacies, state and local program planners and many providers from a suit when administering an "authorized countermeasure" (for example, a medication approved by the Federal Drug Administration under an emergency use authorization) during a declared health emergency. But by its language, one might question whether it also applies when the issue is deciding not to administer a treatment or use a device. This is of central importance as we move toward the most difficult decisions under a CSC: the choice to forgo or even withdraw ventilator assistance from some patients.

In the context of scarce equipment such as ventilators, some kind of triage protocol is needed. There is no one priority system in place for the country, or indeed, for many states. In that void, hospitals have adopted their own systems, usually with the goal of saving as many lives as possible, by giving priority to those with the best chance of survival. This means that those with underlying health conditions may have lower priority, and at times will not be placed on a ventilator.

Even more distressingly, some patients might be taken off a ventilator if it does not appear to be showing

WIN MCNAMEE/GETTY

benefit, though the ability to predict survival if the equipment were left on longer is limited.

Age alone should not be a determinant, nor disability, race or socio-economic status, but each of these may correlate with a higher of underlying illnesses. It is precisely because of these unhappy correlations that public trust is so essential. If a rationing system is perceived as biased in favor of those already privileged, public and political pressure will grow to abandon discretion and substitute absolute rules or lottery systems. Under such systems, the body count will grow.

The nature of this pandemic makes the task of obtaining public trust even harder, because hospitals have been forced to limit or even eliminate visitors in order to reduce risk of transmitting the virus. When family members cannot be at the bedside, sharing the doctor-patient conversations about medical options and observing for themselves the dire conditions, it can be even harder to believe that someone must be moved from intensive care to palliative care. And the emotional distress of being separated from a parent or spouse in the last days of their life, unable to act as an advocate, offer comfort or even provide a sip of water is acute, making it even more likely these family members might question the triage policies in place.

> "Age alone should not be a determinant [of care], nor disability, race or socio-economic status."

States and hospitals should work toward adopting common rules for triage protocols as much as possible, and state medical societies should endorse them as representing an appropriate crisis standard. Governors should use executive and legislative powers to formally acknowledge that CSC is now in place, and that adherence to CSC and to the prioritization guidelines will not be considered a form of malpractice.

A few states already have such provisions under their emergency powers. The governor of New York recently issued an order to protect providers from liability, but does not yet want to talk openly about rationing. Naturally, the state is still working hard to obtain enough equipment to serve every patient, but in the end, any notion of a "standard" of care will be undermined if the rules of triage vary widely from hospital to hospital throughout the state.

With the prospect of rationing comes an obligation to make provision for those most directly affected. If anyone is denied access to the ICU or a ventilator or any other scarce resource because the prospect of survival is slim, palliative care and hospice care must be made available, and contact with family made possible, in person if manageable or by electronic means if not. A crisis standard may be different from the conventional standard, but it is still, in the end, a standard and duty of *care*.

→ **R. Alta Charo, J.D.,** *is a professor of law and bioethics at the University of Wisconsin. She is on leave as a fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford University. The views expressed in this article are the writer's own.*

PRESCRIPTION FOR A TELEHEALTH CURE

America's dangerous dependence on emergency rooms is increasing the risk of rationing. Health care online may be the answer

by **JONATHAN GRUBER**

IN THE UNITED STATES, PEOPLE with, and especially without, insurance are used to heading to the emergency room if they need care quickly. Even before the coronavirus crisis, nearly half of all US. medical care came from emergency rooms. A natural reaction to feeling feverish in the era of COVID-19, therefore, is to rush to the ER.

The problem is that for most people that is exactly the wrong course of action. If people don't have COVID-19 and head to the ER, they could be exposed to others who do. And those who have the virus, but who don't need hospital care, are needlessly endangering doctors, nurses and other medical workers. The ER is becoming the new cruise ship—a petri dish where the infected cross paths with the unexposed.

In China, more than 3,000 doctors got COVID-19. In Italy, at least 50 have already died. In Spain, nearly 14 percent of cases are medical professionals. In US hot spots, especially New York City, hospitals are already overwhelmed, and the devastating shortage of masks and other protective gear only raises the risk of infection.

The result will be fewer doctors and fewer nurses in a system that is already under unprecedented stress, increasing the threat of health care rationing, which in Italy resulted in hundreds, if not thousands, of needless deaths. Many projections suggest that the situation in the United States could be just as bad—if not worse.

That is why we urgently need to turn our focus to telehealth. By having possible COVID-19 patients resolve their issues over phone or video, rather than in person, we can more effectively deploy medical resources to reduce the risk of rationing care. Doctors and nurses will be protected from exposure, and even the ones under quarantine will be able to continue their heroic work.

Yet our telehealth system is already under strain, with wait times of hours or more, and unprepared to handle such a massive influx. To quickly get the system where it needs to be, we need to address a problem that is threefold: excess demand, insufficient supply and mismatch.

The excess demand arises because providers on telehealth platforms are spending time doing things that they really don't have to, like collecting symptoms and patient characteristics, as well as attending to the worried well, who don't really need a consultation.

The insufficient supply is because providers are not responding fast enough to the need for a dramatic national shift toward telehealth platforms, but often their hands are tied: They are limited to specific platforms with which they have financial arrangements.

The mismatch arises because patients can only use the telehealth system associated with their insurance—or they have to pay a visit fee. But different insurance companies may have very different numbers of patients seeking and needing care. A Medicare Advantage plan will have much more demand, for example, than a plan covering mostly younger people. This may leave some

FROM LEFT: SOUMENNATH/GETTY; MARJE/GETTY

telehealth providers overwhelmed and others with more capacity.

We can solve all three of these problems in five simple steps.

First, we create a statewide front end that becomes the first step in seeking treatment. Many companies have chatbots that can collect all relevant background and diagnostic information from patients and provide initial triage for those who are not infected. One of these companies, Buoy Health, found that 85 percent of those using their tool did not need a consultation.

Second, the state contracts with telehealth companies to be the organized distributors for the state. As part of the contract, the telehealth companies agree to a common rate and to provide real-time updates to their wait times.

Third, the state medical professional society sets up a website where all state medical personnel can onboard to help with telehealth on an on-call basis. The state should facilitate on-boarding in every way possible and offer financial bonuses to physicians who sign up.

Fourth, we must make the public aware of these resources through advertising, social media blasts and even work to funnel all those seeking medical advice related to COVID-19 to this front end. This could involve advertising, social media blasts and more.

Fifth, these telehealth consultations should be totally free to the patient, regardless of which telehealth company they use. The telehealth company would be compensated for the visit from an emergency fund. The front end would track which insurance company patients have and which telehealth provider they use. After the crisis passes, there would be a reconciliation, where the fund would be reimbursed by insurance companies for any payments the fund made for their insured individuals. The state or federal government would pay the additional non-insured costs.

Telehealth can help us fight against this deadly pandemic and reduce the risk of providers being forced to ration care. But its effects will be much greater if we make it accessible to all, at no cost, with the shortest wait times possible. N

> "The ER is becoming the new cruise ship—a petri dish where the **infected** cross paths with the unexposed."

→ **Jonathan Gruber** *is the Ford Professor of Economics at the Massachusetts Institute of Technology, where he has taught since 1992. He is also the Director of the Health Care program at the National Bureau of Economic Research and former President of the American Society of Health Economists. His book* JUMP-STARTING AMERICA, *with co-author Simon Johnson, is out now. The views expressed in this article are the writer's own.*

MAKING PEOPLE PAY FOR MEDICAL CARE IN A PANDEMIC IS FOOLISH—AND DEADLY

The U.S. already indirectly rations medical care by ability to pay. We can't have that happen as we fight COVID-19

by **PETER UBEL**

IN AREAS OF THE COUNTRY hardest hit by COVID-19, clinicians are already being forced to make tragic rationing decisions: about who to admit to the hospital, who to transfer to the ICU and who to place on scarce ventilators. These decisions feel out of character with our national identity. We normally think of ourselves as too wealthy, too committed to preserving American lives, to ration medical care.

However, rationing of American health care also takes place every day in subtler ways. We see that when a weekend tennis player with a sore shoulder decides to hold off on getting an MRI, or when a smoker with a touch of heartburn takes a few antacid tablets rather than schedule an appointment with her primary care physician. They delay care because their insurance companies require them to fork over copays and deductibles to cover the cost of these services, and they've decided that their money is better spent in other ways.

This may not sound like rationing on its face. But bear with me. Because when that "heartburn" turns out to

be a heart attack, when that cough turns into a COVID-19 infection, delaying care to avoid out-of-pocket expenses can be deadly.

That's why we need legislation requiring private and government health care insurers to lift all copays and deductibles for at least the next three months, so no American delays necessary medical care out of fear of financial ruin.

In normal times, it makes sense to ask people to pay some portion of their medical care. A $250 copay incentivizes the weekend tennis warrior to decide whether he really needs that MRI. But people don't always know whether they need medical care. Scores of studies have shown that when people face high out-of-pocket costs, they not only seek out less wasteful medical care, but also delay the receipt of necessary care. Most people aren't doctors, after all, and can't be expected to know when they are dizzy from a minor cold or from an evolving stroke.

Recognizing the problems caused by such delays in care, the recently passed CARES Act stipulates that patients will not face any out-of-pocket charges for COVID-related testing and treatment, or for COVID vaccines if and when one becomes available. That's a great start. But it's not enough.

Suppose your neighbor Sam has a fever and his breathing feels labored. He calls his physician and is told to go to the ER, where he is admitted to the hospital. The hospital runs a free COVID test, and it's negative. Great news, except that Sam still has pneumonia from a different infection, and because of the details of his insurance coverage, he will be on the hook for 10 percent of the cost of his hospital stay.

It is insane to charge someone thousands of dollars simply because they had the "wrong" illness. It's even crazier to give people an incentive—"Did you hear how much Sam had to pay when he went to the hospital?"—to delay or avoid necessary medical care in the midst of a contagious pandemic.

I'm normally not a fan of completely free medical care. When care is free, people demand interventions they don't necessarily need at a price society can't afford. But these are not normal times. Until we have this epidemic under control, Congress needs to require insurers to waive copays and deductibles for any and all health care services.

Don't worry that waving copays will drive up demand for unnecessary care. To preserve resources for COVID patients, the U.S. health care system has already stopped performing elective tests and procedures. Offering free care now won't lead people to seek out trivial interventions; instead, it will keep them from delaying life-saving care. Waving copays will also slow the spread of the virus, because delaying care often means delaying self-quarantine.

Don't worry that insurers will be bankrupted by forgoing copays and deductibles for a few months. Congress will make the industry whole. But Congress can't do anything to undo the damage caused if people avoid receiving necessary interventions.

Charging people for medical care during a pandemic may be penny-wise, but it's awfully foolish. N

FROM LEFT: HIRAMAN/GETTY; OLGA EFIMOVA/EYEEM/GETTY

→ **Peter Ubel, M.D.,** *is the Madge and Dennis T. McLawhorn University Professor of Business, Public Policy and Medicine at Duke University. A physician and behavioral scientist, Ubel is also author of* SICK TO DEBT: HOW SMARTER MARKETS LEAD TO BETTER CARE. *The views expressed in this article are the writer's own*

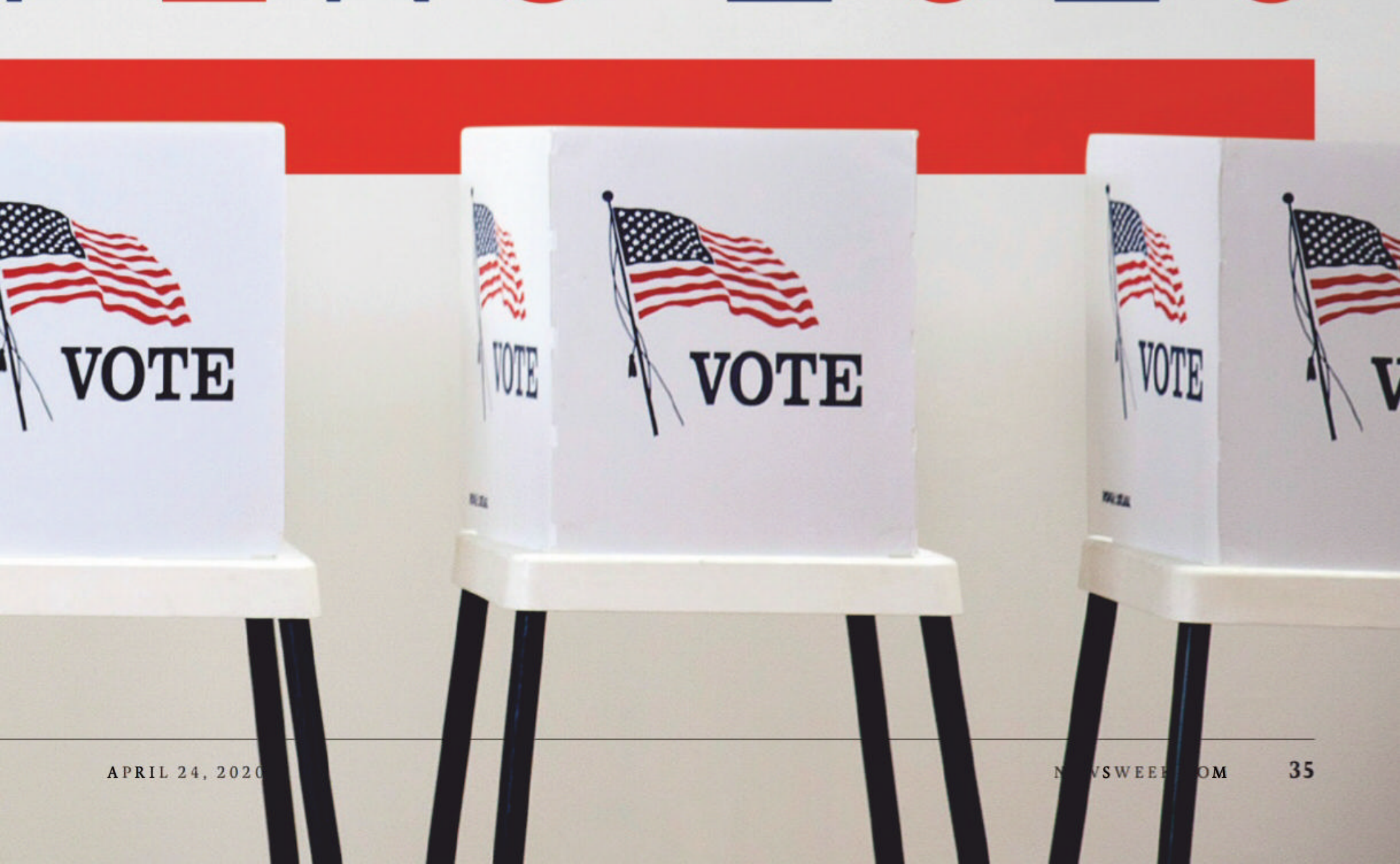
THE POLLSTERS GOT IT WRONG WHEN TRUMP TOOK ON HILLARY

HANDICAP

HILL STREET STUDIOS/GETTY

IN 2016. CAN YOU TRUST THEM THIS TIME? *by* Sam Hill

PING 2020



IT'S POLL SEASON!

Over the next eight months we'll see hundreds of horse-race polls between President Donald Trump and presumptive Democratic nominee Joe Biden. Here's a tip. Don't pay too much attention. The big miss we saw in 2016 can happen again—the coronavirus pandemic could make this election more unpredictable—and there's only so much pollsters can do about it.

Leading up to the last election, President Trump dismissed polls unfavorable to him as fake news. He was right. Polls missed big in 2016. Pollsters believe they know what went wrong and have fixed it. After the 2018 midterm elections, the industry declared victory when pundits using polling data called most races correctly. Harry Enten of CNN trumpeted, "2018 was a very good year for polls." Really? Many of the contests were in deep red or blue areas where the outcome was never in doubt. And there were still some big misses. Polls again underestimated Republicans in a handful of states including Florida and, as in 2016, those misses were enough to result in narrow wins in important races. In all, only 80 percent of polls showed the eventual winners leading. That sounds good, but take out the no-brainers, and the hit rate is more like 50–50—in other words, a coin flip.

So far in 2020, poll performance is mixed. Polls missed in South Carolina. They said Biden was ahead by an average of 15 percentage points and he won by 28 percentage points, although perhaps that's understandable given the rapid consolidation as other candidates dropped out and the huge endorsement from Representative James Clyburn of South Carolina, the third-ranking Democrat in the House. Polls also missed the rise of moderates and fall of progressives, first evident in New Hampshire. Polls were close in Florida, but underestimated Vermont Senator Bernie Sanders in the Democratic primary in Michigan, as they did in 2016.

Those who make forecasts have also missed. Less than a month ago FiveThirtyEight, which focuses on statistical analysis of politics and other key issues, said that Sanders was in "the driver's seat" and "easily most likely to win the Democratic nomination." So much for that.

The first signs that something was screwy in 2016 occurred during the primaries, when New York Senator Hillary Clinton, who led the polls in Michigan by an average of 21 points according to RealClearPolitics, lost to Bernie Sanders by a point and a half. It's been called one of the biggest misses in polling history.

It should've set off alarm bells. It didn't because primary polling is notoriously volatile—lots of candidates, quickly shifting preferences and uncertain turnout. Also, state pollsters often work with smaller budgets than national pollsters, and therefore use less expensive methods like robocalls and online polls. Some surveys call only landlines, and according to *USA Today*, 80 percent of people aged 25 to 34 don't even have one. So Sanders' stunning victory was shrugged off as an anomaly. In fact, the Michigan primary results were the first signs of a problem that showed up big time come that November—a lack of enthusiasm for Clinton among key Democratic constituencies: youth, African American voters and under-educated whites.

"PROTESTATIONS BY POLLSTERS THAT THEY'RE AS THE PSYCHIC POWER NETWORK'S

FROM TOP: ALEX WONG/GETTY; JOE SKIPPER/GETTY; MICHELE EVE SANDBERG/AFP/GETTY

UPSET
In the year leading up to the election in 2016, few national polls picked the winner. Clockwise from bottom left: Election workers in Palm Beach County, Florida; loading ballots in Broward County, Florida; and President Trump's inaugural address in 2017.

turnout from some groups—for example, African American voters—because they thought Clinton had already won? Courtney Kennedy of the Pew Research Center says, "I used to brush off the observer effect question. I think about it differently after 2016. I think about the people who stayed home. I no longer dismiss that idea."

Academics who studied the election believe that's exactly what happened. One of the authors of a 2019 study, Yphtach Lelkes, assistant professor of communication and political science at the University of Pennsylvania, says, "Even though a traditional poll may say that a candidate is going to win only by a few points, let's say 52–48, the equivalent probabilistic outcome may be a 70 percent chance that the candidate will win. People perceive this as a sure thing. They

NOT IN THE PREDICTION BUSINESS ARE AS DISINGENUOUS CLAIM THAT READINGS ARE 'FOR ENTERTAINMENT PURPOSES ONLY.'"

Then came November 8, 2016. Virtually no one picked Trump to win. FiveThirtyEight collected 1,106 national polls in the year leading up to the election. Only 71 showed Trump ahead at any point during the year. Even the Fox News polls and the Trump campaign's internal pollsters expected a Clinton victory. One of the few polls that did show Trump ahead was the USC Dornsife/*Los Angeles Times* poll, and that one got the winner right but the vote count wrong. The academic responsible, Arie Kapteyn, director of USC's Center for Economic and Social Research, said he'd actually expected Clinton to win.

Partisans on both sides were angry. Republicans believed Trump's victory validated their concern that polls were biased. Shocked Democrats felt set up. Much of the anger was directed at pollsters. Some wondered if the polls might somehow have even changed the result, sort of like the observer effect in physics. Did the polls make Democrats overconfident? Did they let their foot off the gas in states like Wisconsin? Did disaffected Bernie voters cast their votes for Jill Stein or even Trump in protest, thinking it wouldn't matter? Was the low even conflate percent chance with margin-of-victory and think that the candidate is going to win 70–30. When people perceive the outcome to be a sure thing, they think their vote won't matter. They become complacent, and, our experiments show, fail to vote.... We also found that Democrats were more likely to consume probabilistic polls and that the effect is bigger when a person's favored candidate is ahead."

For pollsters, 2016 posed an existential question: If polls can miss badly and maybe even change the result, can they be trusted? That question was an icy dagger to the heart of an industry that takes itself very seriously. It led the industry association, American Association for Public Opinion Research or AAPOR, to conduct an extensive analysis of 2016 election polling to find out what went wrong. The result was a defense of the industry and polling.

It says, in essence: We didn't really get it wrong. The national vote estimate said Clinton was ahead by about 3 percent, and in the final tally she won the national popular vote by 2 percent. That's one of the most accurate since 1936. And if we did miss, it wasn't our fault. A lot of people made up their minds

COMEY EFFECT
The debate continues around the impact of then-FBI Director James Comey's (right) last-minute announcement to review new evidence in the Clinton (above) email probe. Will candidate Biden (left) also face a November surprise?

at the very last minute. And if it was our fault, we're not in the prediction business anyway, so you can't hold us accountable. And it won't happen again. We will tweak our methodology, and it'll be fine.

That's hooey. They did get it wrong. Getting the national vote right doesn't matter because that's not how we elect presidents. That's about as useful as dreaming last week's winning lottery number. Because of the electoral college system, the ones that matter are the state polls. They were bad in 2016. Also, protestations by pollsters that they're not in the prediction business are as disingenuous as the Psychic Power Network's claim that readings are "for entertainment purposes only." Opinion polls and election forecasts are joined at the hip. Even if pollsters themselves refrain from making predictions, polling data is a primary input for those who do. But the most important question is: Can pollsters fix it so it doesn't happen again?

The answer is a resounding "Maybe."

One of the problems identified in the AAPOR report is something pollsters call weighting. Pollsters use arithmetic to adjust their samples to reflect what they believe the relevant population looks like. In other words, although most of us think of polling as science, there's subjectivity involved. According to Pew's Kennedy, who also led the AAPOR review, weighting is tricky business. "We try to find those factors that most explain human behavior. Age. Sex. Race. Rural vs. urban. In 2016, most of us had education on the list. But not everyone did. In red states that might not have mattered, but it did in the Midwest."

In hindsight, the miss with regard to better-educated vs. less-educated voters was, if not an excusable

"WHEN PEOPLE PERCEIVE THE OUTCOME TO BE A SURE THING, THEY THINK THEIR VOTE WON'T MATTER. THEY BECOME

FROM LEFT: ETHAN MILLER/GETTY; SEAN PROCTOR/BLOOMBERG/GETTY; CHIP SOMODEVILLA/GETTY

COMPLACENT."

error, at least an understandable one. The report found that in 2012, the less educated and the highly educated voted similarly, so in 2016 some pollsters didn't split them out. Nathaniel Rakich, elections analyst at FiveThirtyEight says, "A really big gap opened up between educated and non-educated and some polls didn't weight by education." The AAPOR report said the Democratic advantage among those with only a high school degree or who did not graduate from high school was around 20 percent in 2012. That group went for Trump in 2016. Because highly-educated people are more willing to take polls, the agglomeration made Clinton appear stronger than she was.But what was most interesting was what AAPOR didn't find. Many pollsters, including the highly regarded Robert Cahaly of the Trafalgar Group—the only pollster to show Trump with a lead in Michigan and Pennsylvania in 2016, according to RealClearPolitics—believe that some supporters are reluctant to admit they're for Trump. AAPOR found no evidence of "shy Trump" voters.

Even more controversially, AAPOR dismissed the "Comey Effect." AAPOR found that 13 percent of the voters in Florida, Pennsylvania and Wisconsin decided in the final week and broke heavily for Trump, just after FBI Director James Comey announced a review of new evidence in the Clinton email probe. But they argued that the impact dissipated before the election. It found an "... immediate negative impact for Clinton on the order of two percentage points. The apparent impact did not last..." It concludes that the erosion of support for Clinton began around the 24th or 25th, before the release of the letter.

Pew's Kennedy says, "I spent a year looking at those data six ways to Sunday. I didn't see strong evidence. I think those headed to Trump were headed that way anyway. But we don't know."

Jill Darling, survey director of the USC Dornsife/*Los Angeles Times* poll, disagrees, "We absolutely saw the Comey Effect." Because her group uses a panel, that is they survey the same people over and over instead of new people each time, they can see when people change their minds and ask them why. Nate Silver, founder of FiveThirtyEight, analyzed the data after the election and concluded the "Clinton lead cratered after the Comey Letter."

A year after the election, Sean McElwee (then, a policy analyst at the think tank Demos; now, co-founder and executive director of Data for Progress), Matt McDermott (a senior analyst and now

vice president at Whitman Insight Strategies) and Will Jordan (a Democratic pollster) came to the same conclusion in a piece written for Vox: "The Comey effect was real, it was big, and it probably cost Clinton the election." The Vox analysis found media coverage shifted radically after the Comey letter, both in tone and content. Coverage of Clinton became far more negative and Trump's more positive, and the email scandal crowded out the accusations that Trump had touched multiple women inappropriately.

Those weren't the only two controversial non-findings to come out of the AAPOR study. The committee of 13 heavy hitters in the polling field also found no "polling modality" effect. That is, they concluded that online polls and automated phone calls were roughly as accurate as in-person calls to a random sample of landlines and cellphones, what the industry calls RDD (Random Digit Dialing.) An RDD survey can cost up to $100,000. By using opt-in internet polls or robo-calls and automated responses, the cost can be shaved down to $10,000 or even $5,000. As a result, there are a lot of cheap polls and few where actual humans talk to a random sample of the population.

Jon Krosnick, professor of political science, communication and psychology at Stanford University, independently analyzed 2016 election polling results and came to a very different conclusion than AAPOR. His team looked at 325 polls conducted during the last week of the election. They found only 21 "gold standard" polls, which is what Krosnick calls those that use person-to-person RDD calls to landlines and cellphones. Only one of those was in a battleground state, conducted by Quinnipiac in Florida from November 3–6. (Although, ironically, it showed Clinton ahead.) In those that used automated or non-random methods, his team found errors of around 5 percentage points, although some were as high as 17 percentage points. For the RDD polls, his group found an error of less than 1 percentage point. His conclusion is that in 2016, "Polls using scientific methods did great."

What now? Pollsters say they've improved their methodology so that 2016 won't happen again. In 2018 Scott Keeter, senior advisor to Pew Research Center, surveyed a number of prominent pollsters to ask if they'd changed methodologies in light of 2016. His paper said, "Facing the growing problems that confront all of survey research as well as public skepticism about polling that followed the 2016

"FOR POLLSTERS, 2016 POSED AN EXISTENTIAL

presidential election, polling practitioners have examined their methods and many have made changes."

For most, that means tweaks. The smaller miss in this year's Michigan primary could mean they've succeeded. Rakich says, "Hopefully [state-level] polling will do better this year." Pollsters have made no changes to deal with another Comey-like surprise, but they don't believe they need to. When asked about the possibility of future campaigns creating last-minute events to sway the public, Kennedy says, "Twenty years ago a manufactured effect might have made a difference but now, with polarization, people are so tied to political tribes and so skeptical that it would not necessarily have any effect."

Krosnick is less optimistic that the problems of 2016 will be fixed: "Unless people are willing to spend money on better public polls in 2020, we're not going to be any better off. There's no statistical manipulation by aggregators like FiveThirtyEight that can turn a sow's ear into a silk purse." In other words, although some forecasters like FiveThirtyEight give what they consider better polls more weight, Krosnick believes there just aren't enough good polls out there.

PROBLEMS FIXED? "We asked pollsters to predict heads or tails and got angry when they couldn't." Trump fans at a rally in Houston and the President at a trade show in Washington.

It's not likely that additional spending will happen, because the kinds of polls Krosnick is talking about are getting ever more expensive due to declining response rates. According to Pew, in 1997 one in three people would take a phone survey. Now a surveyor has to call 15 phones or 15 times to find a person that will talk. Many people won't even answer their cellphones from a number they don't recognize.

Pollsters and those who use polling data have an obvious motive to argue that the problems can be fixed. But here's the reality. Even if pollsters had corrected for all of these possible issues—under-sampling of less educated and young voters, more polls after the Comey letter, an adjustment for "shy Trump" voters and had they used "gold standard" polls, there's still no guarantee they would have gotten it right. Some elections are simply too close to call. It's possible the problem wasn't with how pollsters poll, but rather with what we expected from them.

Roughly 129 million votes were cast in the 2016 election, but the election was decided by 78,000 voters in three states—Michigan, Wisconsin and Pennsylvania. That's 0.6 percent of the votes cast in those states. Even the best polls typically have an average absolute margin of error of one percentage point. In other words, we asked pollsters to predict heads or tails and got angry when they couldn't.

Pollsters and forecasters understand the limitations of what they can and can't do. That's why forecasters couch their predictions in terms of probabilities or odds. But humans don't think in those terms. Sean Westwood, assistant professor of government at Dartmouth College and lead author on the study cited above, says, "....the research shows it is nearly impossible to convey polls in a way that does not confuse the audience." Rakich says, "We told people that Clinton had about a 70 percent chance to win. If we'd run the election three times, she'd have won twice." We ran it once and she lost.

The company he works for, FiveThirtyEight, was one of the few forecasters to even give Trump a chance. To compensate for the uneven quality of individual polls, they used sophisticated models incorporating polling with other data. But even they miss sometimes. In the 2018 midterms, FiveThirtyEight predicted 506 races. Their best model predicted 97 percent of races correctly—and roughly 90 percent of the really competitive ones. But that's still 16 contests that it got wrong. Going forward, is 97 percent good enough? Probably. Unless the miss is the presidency.

After 2018, pollsters are feeling pretty good about themselves. Courtney Kennedy says, "The public reaction in 2016—that polls are garbage—was understandable but wrong. National polls in 2016 and the 2018 midterms showed it was an anomaly. Polls are still valuable."

Maybe, but pollsters shouldn't relax too much. Because more big misses are coming. Even if 2020 is better, there's no guarantee 2022 or 2024 won't serve up a shocker. Dr. Natalie Jackson, director of research at PRRI says, "We are going into this cycle with an unprecedented level of uncertainty, especially with coronavirus. Predicting the outcome is going to be perilous and fraught with complications. We might not know the answer until we have the election."

Maybe the real lesson of 2016 isn't for pollsters or forecasters, but for the public: Avoid putting too much credence into polls in tight races, even if they say what you want them to. You have to, no matter what, vote.

QUESTION: IF POLLS CAN MISS BADLY AND MAYBE EVEN CHANGE THE RESULT, CAN THEY BE TRUSTED?"

FROM TOP: SAUL LOEB/AFP/GETTY; OLIVIER DOULIERY/POOL/GETTY

→ **Sam Hill** *is a* NEWSWEEK *contributor, consultant and bestselling author.*

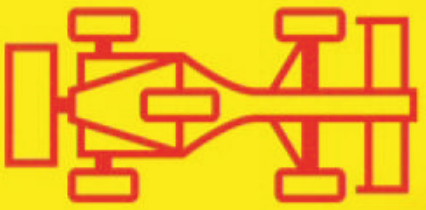
120%

How much Stubhub says it will give back to customers who bought tickets on its site to sporting events (or other live experiences) cancelled due to the pandemic, via a coupon for future orders

$8.5 billion → How much money Americans—47 million in all—intended to bet on March Madness this year

-44%

How much Formula One Group's stock price has fallen since peaking in January amid the cancellation or delay of various Grand Prix events, the Indy 500 and other races



PETER DAZELEY/GETTY

BY THE NUMBERS

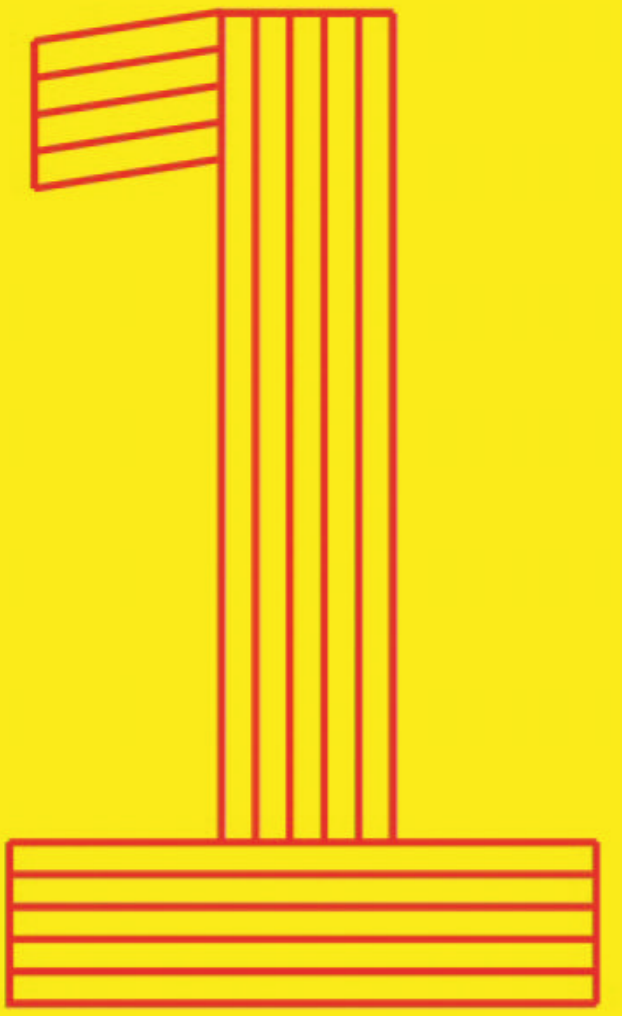
Sports & Coronavirus

The COVID-19 outbreak has left the six in 10 Americans who consider themselves sports fans with a lot of extra time, not to mention money, on their hands. How much has the pandemic cost professional sports and related industries in terms of lost revenue, viewership and missed opportunities? Here's a sampling.—*Sarah Dreher*

SOURCES: STUBHUB, AMERICAN GAMING ASSOCIATION, NASDAQ, TEAM MARKETING REPORT/FAN COST INDEX, CHURCHILL DOWNS, NATIONAL HOT DOG AND SAUSAGE COUNCIL, FIVE THIRTY EIGHT, ESPN, INTERNATIONAL OLYMPIC COMMITTEE

360,237

The number of attendees over the five days of Derby Week last year, including 150,729 at the Kentucky Derby itself. This year's race has been rescheduled from May 2 to September 5.



The number of times the Kentucky Derby had been postponed before this year. In 1945, it was moved to June because of World War II.

$234.38 → How much it cost a typical family of four to attend a major league baseball game in 2019, including tickets, food and parking. Costs for the most popular teams, such as the Los Angeles Dodgers and the New York Yankees, were much higher.

18.3 million

The estimated number of hot dogs that major league baseball fans ate during the 2019 season.

How much was left of the regular NHL season—189 games in all—when play was suspended in March

15%

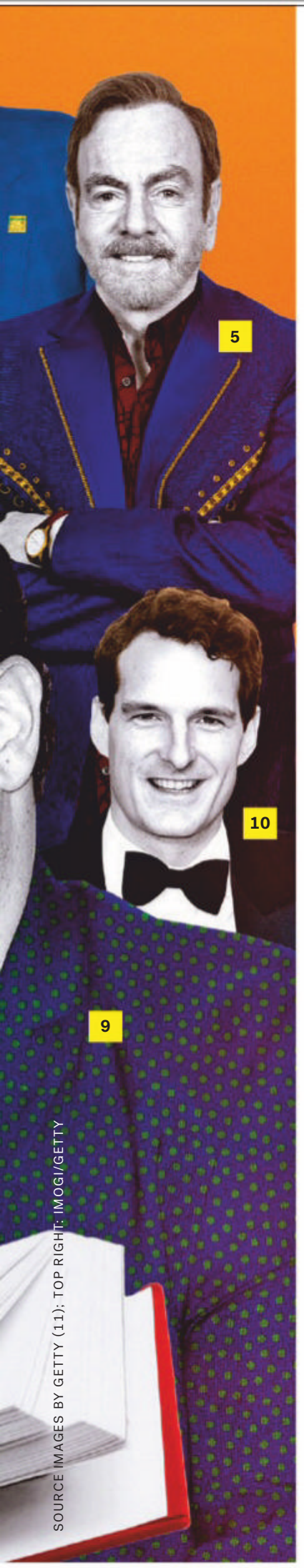
5

The number of times the Olympics have been cancelled (three times, during world wars), suspended (for 34 hours during the 1972 Munich Olympics, when a Palestinian terrorist group took hostages in the Israeli housing compound, killing 11) or postponed (a first, this year)

Home But Not Alone

With schools closed due to the pandemic, celebrities have gone online to help teach young kids

MARVELOUS FREAKS
Inspiration from some of nature's oddest places. » P.46



SOURCE IMAGES BY GETTY (11); TOP RIGHT: IMOGI/GETTY

HOME SCHOOL
Teaching and entertaining homebound children: 1 U.K. TV fitness host Joe Wicks 2 U.K. TV game show host Carol Vorderman 3 Sam Sorbo 4 Kevin Sorbo 5 Neil Diamond 6 Amy Adams with daughter Aviana 7 Jennifer Garner 8 Robert Irwin 9 Josh Gad 10 U.K. TV historian Dan Snow.

WITH KINDERGARTEN TEACHERS UNABLE TO read to their pupils in classrooms due to coronavirus quarantines, some parents are allowing celebrities to handle a portion of that task.

Head to Jennifer Garner's Instagram page, for example, and you'll hear the *Alias* actress whinny like a horse and snort like a pig as she reads *Big Red Barn* by Margaret Wise Brown. More than 210,000 have watched the five-minute video. Likewise, Amy Adams' reading of *The Dinosaur Princess* by her daughter, Aviana Olea Le Gallo and illustrated by her husband, Darren Le Gallo, has been watched 540,000 times. Garner and Adams launched their reading campaign "Save With Stories," on March 16 and are using it to raise money for charities Save the Children and No Kid Hungry.

Aside from "Save With Stories" there is also Josh Gad, who has a 13-minute rendition of *Dr. Seuss' Happy Birthday to You!* that might be of particular interest to young fans of Disney's *Frozen* who will recognize Gad as the voice of Olaf the snowman.

For parents looking for significantly more help with the education of their kids as they remain cooped up, actress Sam Sorbo has launched a YouTube vlog dubbed *The Accidental Home Schooler*. Sorbo has three children with her husband, Kevin Sorbo (the two met when she was cast on his 1990s hit series, *Hercules: The Legendary Journeys*), and the couple has been homeschooling them for more than a decade.

Sam Sorbo is also promoting Coronavirus-Homeschooling.com, a new website from the Texas Home School Coalition that contains curriculum parents can use for students in a variety of grades. Click on the subject of "animals" for fourth graders, for example, and you'll see TV personality Robert Irwin give a tour of the Australia Zoo, followed by a video showing how to draw a panda bear and finally a reading and writing exercise about bees and hummingbirds.

Sam Sorbo is fluent in five languages and studied biomedical engineering at Duke University, but she says parents need not be overachievers to homeschool their children."Many feel inadequate to the task even though they went all through high school," she told *Newsweek*. "They're not inadequate, and now a whole bunch of people came together to create this website with myriad solutions."

The actress says her work with Coronavirus-Homeschooling.com and her *Accidental Home Schooler* vlog came naturally to her, given she's an advocate of the practice. The Department of Education estimates about 3 percent of children ages 5–17 are home-schooled, and Sam Sorbo wants that to increase.

"Homeschooling was the furthest thing from the minds of parents. Yet here they find themselves because of coronavirus. Try it on. You have nothing to lose," she said.

BY

PAUL BOND

There's also a host of British celebrities helping out with distance learning. Carol Vorderman, a U.K. game-show host for 26 years, created her The Maths Factor website about a decade ago, but she has made it free for kids ages 4–11 until schools reopen. Dan Snow, known as The History Guy in the U.K. after making several shows on that topic for the BBC and other outlets, has made his History Hit streaming service available free for a limited time. And Joe Wicks, who hosts a U.K. show called *The Body Coach*, has launched *P.E. With Joe*, a live and on-demand YouTube show typically 30 minutes in length. More than 2.3 million viewers tuned into his fifth show on March 27.

But for parents looking for the most basic COVID-19 lesson to impart to their children—how to avoid it—myriad celebrities are trying to make the concept of cleanliness fun. Neil Diamond's new YouTube version of "Sweet Caroline," for example. Sample lyric: "Hands...Washing hands...Reaching out...Don't touch me...I won't touch you!"

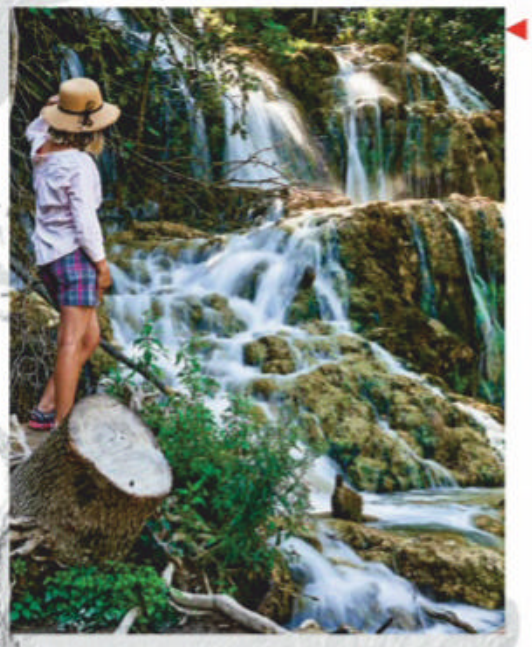
Photo illustration by GLUEKIT

01 Fly Geyser
Washoe County, Nevada

This geyser in northern Nevada, found amidst fields of grass was created by accident when—as the story goes—in 1964, a geothermal power company drilled a test well where the geyser now sits. The combination of calcium carbonate deposits and scalding hot water resulted in three nearly 6-foot-high, brightly colored red and green mounds that shoot hot water into the air.

03 Lake Sørvágsvatn/ Leitisvatn
Vágar, The Faroe Islands

This freshwater lake is famous for its appearance of "floating" above the ocean. Though it's actually not even 100 feet above sea level, from various camera angles, the lake looks like it is hundreds of feet above the ocean because of its juxtaposition with a dramatic waterfall and the cliff to its side.



04 KrKa National Park
Šibenik-Knin, Croatia

This national park in southern Croatia is famous for having not one, but seven, gorgeous waterfalls streaming with turquoise waters, including the picturesque Skradinski buk waterfall. The crystal clear water in its basin is typically filled with visitors taking a dip.

UNCHARTED

Marvel at These Freaks of Nature

The world is filled with unique, breathtaking sites—from boiling craters to caves full of luminescent glowworms. While a global pandemic or natural disasters and extreme weather like tsunamis, hurricanes and tornadoes bombard our psyche, we might be tempted not to appreciate nature. In fact, relishing the wonder of nature can provide some respite from too much time indoors. These sites are a great place to start when looking for hope in some of Mother Nature's greatest offerings. —*Alexandra Schonfeld*

02 The Marble Caves
Aysén, Chile

These caves—accessible only by boat—sit in the heart of Patagonia and were formed over 6,000 years as water continued to splash against the solid rock formations to create these intricate and unique blue marble formations.

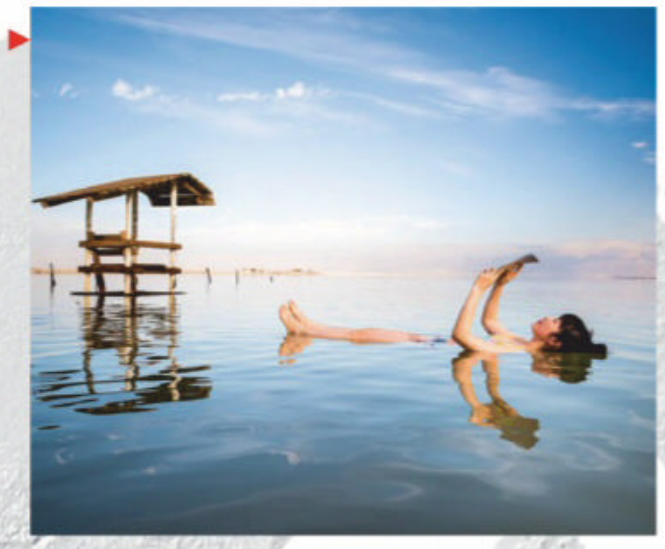
01: ROPELATO PHOTOGRAPHY/GETTY; 02: SIAN SEABROOK/GETTY; 03: JAN EGIL KRISTIANSEN/GETTY; 04: SEBASTIAN CONDREA/GETTY; 05: MAHMUT SERDAR ALAKUŞ/ANADOLU AGENCY/GETTY

05 Pamukkale
Denizli, Turkey

At Pamukkale—or "cotton castle" in Turkish—warm thermal water flows down the astounding limestone deposits that have formed along the rim of a valley. And while the natural waterfall is worth a trip in its own right, it also sits among the ancient Greek-Roman city of Hierapolis that has been well preserved for visitors to explore.

06 Dead Sea
Israel/Jordan

The Dead Sea has the lowest elevation on earth—at about 1,410 feet, and is also one of the world's saltiest bodies of water creating a unique experience; rather than swim, visitors will find themselves floating nearly effortlessly in the mineral-rich waters.

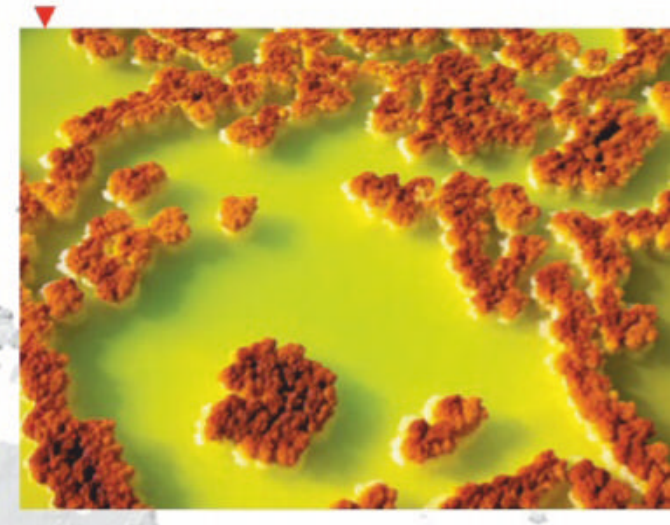


08 Darvaza Gas Crater
Derweze, Turkmenistan

This burning hole in the ground—known as the "Door to Hell"—was said to have been created about four decades ago after the ground under a Soviet drilling rig gave way and the noxious gases were then lit on fire to protect the surrounding wildlife.

07 The Danakil Depression
Afar Region, Ethiopia

One of the hottest places on the planet—with average temperatures of 94 degrees and records reaching above 122 degrees Fahrenheit—the heat from volcanic activity creates yellow, green and orange deposits. The site is replete with sulfur springs, volcanoes, geysers, acidic pools, salt pans and mineral-filled lakes.



09 The Pinnacles
Cervantes, Australia

Rising from the Nambung National Park in Western Australia, these thousands of limestone formations look like they came straight out of a *Star Wars* desert scene, and each is unique—some visitors have even said various pillars resemble animals or cartoon characters.

10 Waitomo Glowworm Caves
Otorohanga, New Zealand

Inside this dreamlike cluster of caves in New Zealand's North Island is what looks like a star-filled night sky, but is actually thousands of glowworms. Key to seeing the glowworms work their magic is complete silence, as the worms don't respond well to noise.

06: MAX SHEN/GETTY; 07: BERTRAND LINET/GETTY; 08: DANIEL KREHER/GETTY; 09: TOM STODDART/GETTY; 10: MATTEO COLOMBO/GETTY

Illustration by BRITT SPENCER

PARTING SHOT

Uzo Aduba

IF YOU ASK PEOPLE WHO WAS THE FIRST WOMAN TO PARTICIPATE IN A presidential debate, or the first black person to run for president, you might hear names like Hillary Clinton or Jesse Jackson. In fact, the late New York Congresswoman Shirley Chisholm was the first woman to run for the Democratic nomination *and* the first black presidential candidate of any major party. "There are a lot of young people who don't know the name Shirley Chisolm," says Uzo Aduba, who plays her in *Mrs. America* (Hulu, April 15). "There's a real desire to make sure that you get it right." Chisholm's story is just one part of the tapestry of stories told in the nine-part series which chronicles the women behind the various campaigns to help pass the Equal Rights Amendment in the early 1970s, including that of ERA-opponent Phyllis Schlafly (Cate Blanchett) and feminist icon Gloria Steinem (Rose Byrne). But Chisholm's name and legacy has largely been left out of the narrative of the women's rights movement, and it's time for that to change, says Aduba. "She's been missing from the historical conversation."

"There's a real desire to make sure that you get it right."

Was it intimidating to play such an iconic figure from history?
Yes. Even though I didn't know so much of the ins and outs of her politics, I knew she was a force for justice and change mostly because my mom was a passionate lover of hers, so that made it duly intimidating.

What do you hope people take from Chisholm's legacy?
I hope there's a real respect for her innate strength. I also really want people to understand that there was someone who came before that proverbial door was open to people of color and women in office. I want her to hold her rightful place in history.

What was it like working with performers like Cate Blanchett and Sarah Paulson?
Awesome. Full stop. It was really satisfying going into this experience with deeply accomplished women who are so seasoned in this industry to know that the love for the craft is absolutely still there.

Later this year you'll co-star with Lupita Nyong'o in the HBO Max series *Americanah*. What can you tell us about it?
Absolutely nothing. (Laughs) I can tell you that I'm excited. My family is Nigerian, and it will be the first time I'll have ever played a character from my own place. I know that every single person involved in this product is passionate about both its story and its existence. *—H. Alan Scott*

© 1986 Panda symbol WWF ® "WWF" is a WWF Registered Trademark

HELP SAVE THE 'WOW'

These giants of the animal kingdom need help. Despite their strength and cunning they're no match for a poacher's rifle. For 50 years WWF has been securing protected areas worldwide, but these aren't enough to stop the killing. To disrupt the sophisticated criminal gangs supplying animal parts to lucrative illegal markets, we are working with governments to toughen law enforcement. We're also working with consumers to reduce the demand for unlawful wildlife products. Help us look after the world where you live at **panda.org/50**

WWF

Silverback Western lowland gorilla.

© NaturePL.com / T.J. Rich / WWF