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Perspective

Covid-19 and the Stiff Upper Lip — The Pandemic Response in the United Kingdom

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For many weeks, the British instinct to "Keep Calm and Carry On" was the public face of the U.K. government's response to Covid-19. Policies were to be "based on the science," with an

initial focus on containment, involving identification of people infected with SARS-Cov-2, contact tracing, and isolation of people with proven exposure. As late as the second week of March, there was no appetite for banning mass gatherings, since we were told, on the basis of statistical modeling, that doing so would have minimal impact. On Thursday, March 12, when Prime Minister Boris Johnson held his first major press conference on the issue, flanked by his chief medical advisor and his chief science advisor, there was no recommendation, far less any instruction, to shut down one of the busier weekends on the sporting calendar. Such inaction continued despite the prime minister's warning that "many more families

will lose loved ones before their time."

More than 250,000 people gathered at the annual horseracing carnival in Cheltenham, England. Tens of thousands of Scottish fans were about to travel to Wales, by car, bus, and train through England, for the Scotland-Wales rugby match. Many more tens of thousands were set to travel up and down the country to attend soccer matches. In the absence of a government policy, the football authorities (both rugby and soccer) acted with admirable responsibility: they postponed the matches despite the financial losses they suffered. The racing proceeded — perhaps the racing industry is more prepared to gamble.

Otherwise, it was largely business as usual over the weekend, although some shops were stripped of toilet paper. Many members of the U.K. public health community had been sending messages of increasing concern, some as far back as the initial publication of data from China in January, more as the epidemic gathered steam in the United Kingdom and Europe in February, and many more as the plight of our Italian colleagues and their patients became apparent. The lack of government action in the second week of March was also completely out of step with almost all other European countries.

The U.K. chief science advisor's statement, repeated in interviews, that the way out of this epidemic was to get to 60% or more of the population recovered from infection and thus approach "herd immunity" did not provide reassurance. An infectious disease modeler at Harvard, originally from the

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United Kingdom, initially assumed that this proposal was meant as satire.1 Much of the public immediately understood that the tradeoff appeared to be to accept a large number of deaths soon, to ultimately get the population to a Covid-19-resistant state. The minister of health was obliged to deny on the Sunday talk shows that this strategy was the government policy. At the same time, he asked any U.K. company that could switch to the manufacture of ventilators to do so; the government would guarantee to buy as many as could be produced.

The other argument for "Keep Calm and Carry On" was that behavioral scientists were warning that "fatigue" with strict infectioncontrol measures would set in if they were triggered too soon. The newspapers have sourced this advice to a government "nudge unit."2 Nobody appears to have asked this "behavioral insights team" whether they were working from empirical experience of a highly contagious infectious disease that may be lethal for several percent of older people and will most likely kill people we know, as well as prominent public figures. The fear of such fatigue combined with legitimate concerns about the adverse effects of social distancing on some older people's sense of isolation, loneliness, and health care access led to an argument that social distancing should be delayed as long as possible.

On Monday, March 16, late in the day, at another press conference and again flanked by the chief medical advisor and chief science advisor, the prime minister abruptly changed gears, though whether from neutral to first, second, or a higher gear is a matter of opinion. Anyone with a fever or a persistent cough should selfisolate for 7 days. Good advice. Anyone who lives with these persons should self-isolate for 14 days. Also good advice. People "should avoid pubs, clubs, theaters, and other such social venues" as well as nonessential travel, but this advice was not enforced. A mixed message. People should work from home if possible, but that was largely up to employers to decide. Vague. Anyone over 70 was advised to avoid "nonessential social contact." Vague again. The government was "moving emphatically away from" mass gatherings, but again these were still not (and are still not) banned. British understatement was in full swing - citizens, businesses, and nursing homes were asked to read between the lines and go beyond explicit government policy. The prime minister's father announced that he would be going to the pub if he chose to, since they needed the customers.

Later on Monday, what is apparently the scientific underpinning of the change in government policy was finally published online: a model from a very experienced group at Imperial College, London.3 Under any response scenario, the number of cases that require ICU admission greatly exceeds the surge capacity of the National Health Service (NHS). However, the model also predicts that closing schools and universities would help dampen the epidemic peak . . . and yet the schools were left open (although many private schools chose to close). Finally, on Wednesday it was announced that the schools would close beginning at the end of the week, except for vulnerable children and the children of NHS workers and essential personnel.

Perhaps the government has also finally understood the low point to which the NHS has sunk after a decade of budget cuts dictated by austerity policies. We have universal access to care free at the point of service, and loval and hard-working health care professionals, yet general practitioners (GPs) are in very short supply, and many hospitals are old and underequipped. Brexit has contributed to the loss of European medical and nursing staff. Thanks to government "reforms" of the NHS, it has become highly decentralized, with over 200 commissioning groups in England that can make independent decisions about staffing and procurement of equipment — far from the monolithic "socialist" health care system it is often assumed to be. The devolved governments in Wales, Scotland, and Northern Ireland have substantial health system autonomy. At a time when central management of staff and resources might be most helpful, the decentralized decision-making structure leads to competition for resources and inconsistent policies.

Overall, the United Kingdom has the third-lowest number of hospital beds per 1000 population among the Group of 20 countries.4 Medical staff throughout the country are reporting a severe shortage of personal protective equipment, which obliges them to triage patients with potential Covid-19 while wearing paper face masks and plastic aprons, rather than visors, gowns, and appropriate masks. As medical staff acquire a new fever or cough, they are advised to self-isolate without a SARS-Cov-2 test, further reducing available clinical staff.

Efforts are being made to ramp up testing for health workers, spe-

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cialists are being retrained to work in other clinical areas, finalyear medical students whose summative clinical exams have been canceled will be graduated and provisionally licensed to practice, GPs are moving visits online and to video links. Guidelines are being written to clarify legal responsibility for triage decisions. A whole health system is being restructured in a matter of days and weeks.

Throughout the past few weeks, the U.K. mantra has been "we will act at the appropriate time according to the science." Many clinicians and scientists have been pushing the panic button, but the alarm, if heard, was not acted on publicly until the third week of March. Everyone is hoping that their gut instincts, the experience of other countries, and now the models are wrong. What is not in doubt is that barring a miracle, a treatment, and ultimately a vaccine, the NHS in the United Kingdom is about to experience a challenge unlike any other in its 70 years of existence.

Disclosure forms provided by the author are available at NEJM.org.

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