CAUS
Concerned Actuaries of the U.S.

The Need for Better Risk Assessment and Management

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"If anything kills 10 million people over the next few decades it's most likely to be an infectious virus rather than a nuclear war…We've invested huge amounts to deter nuclear weapons but we've actually invested very little in a system to stop a pandemic."

Bill Gates, ***2015***

It's not like no one warned us and our elected officials that we needed to get ready. In 2005, urging action President W. Bush pointed out, "If we wait for the pandemic to appear, it will be too late to prepare." A decade later in 2015 after studying the Ebola crisis, Bill Gates raised the alarm with this grim assessment, "The problem wasn't that we had a system that didn't work well. The problem was that we didn't have a system at all." And, for the past five years, experts around the world gathered regularly to discuss the threat of another global pandemic and "…the question of whether we are prepared for the next one."

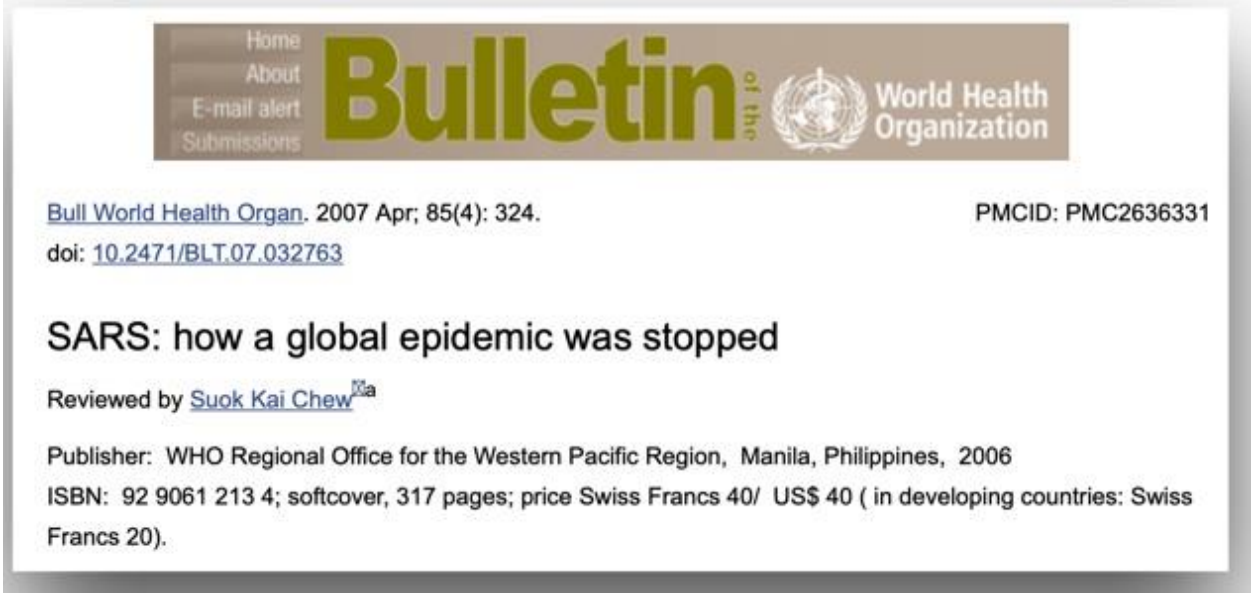
Given the volume of information generated over the past decade and the prestigious body of “warners,” it seems not only fair, but necessary to ask why we were so unprepared when COVID 19 hit. In 2015, Mr. Gates clearly identified a number of the structural and systemic failures he saw in the Ebola response as harbingers of the next pandemic, listing at the time problems with collecting, managing and analyzing surveillance data; major “personnel” issues including not having medical teams “ready to go,” not having ways to prepare people and manage volunteers; and not having enough people to field an effective treatment program. And yet, all the conferences,

research and discussion did not produce the budgets, the planning, the training, the systems we needed.

Why Not?

The public ignored the risk because it did not understand its relevance.

Aside from the current lack of regard for and animus toward “elites” and experts, a public demand for better planning did not emerge pre-pandemic for fairly obvious reasons. First, our experience with possible “pandemics” (e.g., SARS Ebola, Influenza) suggested that while they were disruptive and scary, the experts had managed previous “pandemics” without much disruption to those not directly affected.

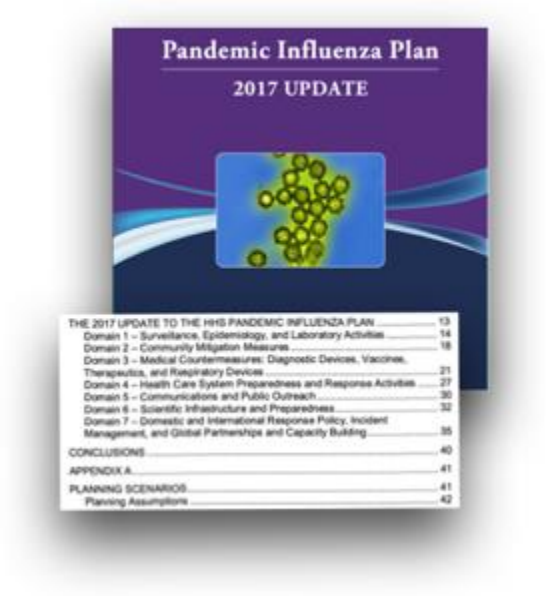


Equally important, the information that was generated and discussed at the conferences and elsewhere about pandemics - information that might have helped us understand how a pandemic might affect us personally - was not marketed to the general public. In that regard, when it came to the need for pre-pandemic risk assessment and

management, the past five years are reminiscent of the early years of the climate change effort. Imagine, for example, the climate change discussion that was going on pretty much just amongst scientists and elites some twenty years ago. Then suppose a polar ice cap had in fact completely melted at that moment in time and the resulting tsunamis had washed over San Francisco, New York, and Miami within a six-month timeframe. The next day, people like us would have been asking “Why didn’t we see this coming? But it didn’t and while still needing more holistic analysis, a marketing effort focused on how climate change would affect businesses, communities and individuals informed and personalized concerns about climate change and made it one of the more visible political agenda items in the world.

The public did not interact with the risk effectively because the risk assessment did not make clear the breadth and depth of personal exposure.

Much of the relevant pandemic research and discussions were understandably focused on managing the public health needs associated with a possible pandemic. More specifically, research and discussions tended to focus more on identifying the viral risk and how public health core strategies such as containment, treatment, and eradication might be managed by the public health community than on how the design and implementation of those strategies would affect the broader general public, the economy, and the political environment.



The US Department of Health and Human Services (DHSS) 2017 Update of its Pandemic Influenza Plan Table of Contents reflects this focus. The lack of a more holistic analysis meant, however, that neither the general public nor their elected officials understood how the threat *and/or* the public health proposed responses might be relevant to their lives or responsibilities. And it is worth noting that while public health management concerns are front and center, the report does include on page 42 of the 52-page document under the heading “Planning Assumptions,” the following:

- *If the pandemic is characterized by severe disease, it will have the potential to disrupt national and community infrastructures (including health care, transportation, commerce, utilities, and public safety) due to widespread illness, absenteeism, and death among workers and their families, as well as concern about ongoing exposure to the virus.*
- *Not all jurisdictions will experience clusters of disease simultaneously; however, near- simultaneous clusters likely will occur in many communities across the United States, thereby limiting the ability of any jurisdiction to support and assist other jurisdictions.*

Note, however, that the disruptions envisioned are caused by the spread of the disease, not by both the spread of the disease and the attempt to contain the spread of the disease (e.g., stay-at-home orders).

Key Takeaway

More robust pre-incident holistic assessment of risk and opportunity is essential. We must, of course, recognize the incredible difficulties the scientific and medical communities faced in responding to the new coronavirus (COVID 19). But we must also recognize the need to assess and manage the challenges and opportunities implementation of the public health community's historic core pandemic response strategies - containment, treatment, and eradication - might cause.

The public did not interact with the risk effectively because they, their elected officials, and the news media were focused on other serious issues that they found both credible and more relevant at the moment.

The general public, their elected officials, *and the news media* were focused on climate change, income disparity, concerns about the national debt, fears of another recession, the insolvency of the Social Security, the ups and downs of the stock market and the 2020 elections, just to mention a few. Complicating our ability to prioritize is the fact that we live in a world where "news" on subjects major and minor are updated with terrifying frequency as the media, social and otherwise somehow provide access to everything from riots in the streets to what [fill in the name] had for breakfast and said to who about [fill in the topic]. The constant up-dating provided through the ether creates a sense of urgency at a safe distance while remaining both pervasive and invasive and demanding attention for *today's* news.

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Key Takeaway

A practical plan for developing and sustaining real-time response capacity is essential. History suggests that the tendency to focus on the immediate is likely to continue; so, the challenge of being ready for pandemics must include not only a more holistic assessment of the risks, challenges, and opportunities but also a practical plan for developing and sustaining real-time response capacity.

In a concerted effort to address the need for a more holistic analysis of the nation's health care system, CAUS has spent more than two years designing and building a Comparative Actuarial Assessment Model (CA2M) capable of providing consumers and their elected officials with the information they need to inform their decision-making far more effectively regarding the potential positive and negative impact of proposed changes to the system. We think our work is relevant to the moment and are very interested in sharing with and learning from others in the Arena (see below for a few examples).

Recognizing the responsibilities and challenges consuming the days and nights of everyone in the Arena these days, we are launching the Thinking Ahead initiative to focus on critical issues, allowing for a range of engagement both in terms of time and expertise.