Vº.15
Issue 2

Baylor College of Medicine

RICE UNIVERSITY'S BAKER INSTITUTE FOR PUBLIC POLICY

HEALTH POLICY research

Rice University's Baker Institute for Public Policy-Baylor College of Medicine
Joint Program in Health Policy Research

Is it time to establish a real-time, technology-driven, national surveillance system to manage public health emergencies?

"Yes, the need for timely, accurate, and reliable data required to manage widespread public health emergencies has never been greater," say Dean F. Sittig and Hardeep Singh. "We need a national information system to enable health officials to answer critical questions. For instance, it has been hard to pinpoint how many Covid-19 patients are in a given geographic area, their age, and race; how many are hospitalized; and how many are in intensive care, on ventilators, or have died."

In an attempt to get answers, Vice President Mike Pence requested hospitals report key Covid-19 information, such as the daily number of Covid-19 patients, in an Excel file sent via e-mail to the Department of Health and Human Services. As one of the most technologically advanced societies in the world that spends the most money by far on health care, the U.S. needs more novel solutions than email for gathering data at a national level.

In 2001, an effort was made to design a national health information infrastructure—a knowledge-based system capable of providing critical information to make sound decisions in emergency situations. However, this vision was never operationalized. Creating such a virtual backbone is foundational to the health of the nation.

A key question is whether the Covid-19 crisis will change our expectations for privacy, confidentiality, continuous monitoring of our location and activity, and strategic but focused government intervention. Essential information needed by the White House Coronavirus Task Force is only possible through widespread data collection, aggregation, and analysis. This comes with a price, not only in terms of dollars but also in terms of trade-offs that involve significant changes to the nation's existing health information technology and legal infrastructure to gather and analyze data. The vast majority of these changes are technically possible, but currently illegal or socially unacceptable.

For instance, over 95% of hospitals use electronic health records (EHRs) to manage the care of patients now, so the timing for the creation of a real-time data collection infrastructure is perfect. In addition, many existing state or regional health information exchanges facilitate the collection, exchange, and analysis of clinical and administrative data between care providers.

We will need to change our current rules, regulations, and social norms to enable robust information capture. The government-driven surveillance and intervention that would be required seems impossible in our modern and open society that prides itself on personal privacy and choice. To maintain adequate trust, the most intrusive functions of a data-collection system could be limited to public health emergencies, and governed by a bipartisan public-private consortium that includes respected academics and members of the public. By keeping a sharp focus on maximizing benefits, treating everyone equally, and prioritizing efforts to save lives while maintaining trust and confidentiality, such a system would meet the highest ethical standards.

We should no longer rely on outdated laws, social norms, or potentially inaccurate modalities to obtain health information essential to save lives.

ACCESS   FINANCING   ORGANIZATION   DELIVERY   OUTCOMES

HEALTH POLICY research

Rice University's Baker Institute for Public Policy-Baylor College of Medicine
Joint Program in Health Policy Research

healthpolicy.bakerinstitute.org

RICE UNIVERSITY'S
BAKER INSTITUTE
FOR PUBLIC POLICY

Baylor
College of
Medicine

Volume 15, Issue 2, June 2020