Lack of Real-Time Data for Blood Collection and Transfusion Hampers Decision-Making for All of Us

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n the 1980s, 40 years ago, the HIV epidemic hit, creating new and unforeseen challenges for the safety of the blood supply. As evidence developed that HIV was blood-borne, the early response resembled the initial stages of grief, with denial followed by anger. Eventually, the need for



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change took hold. Measures to increase the safety of the blood supply were accepted and became an integral part of the blood establishment's culture. While the challenges posed by HIV and other emerging infectious diseases stressed the blood community, the response made it better than before.

Now we are faced with SARS-CoV-2, a very different disease causing a new array of problems. Complications due to social distancing have created a roller-coaster of shortages in the blood supply, with an initial plunge in March followed by a steep rise in April and May (thanks to a spike in donations and reduced demand) and now, as we try to re-open, a new drop in June. These shortages and the wild swings in supply have refocused attention on an old issue: a startling lack of real-time data on blood collection and transfusion in the U.S. Without data to understand supply and demand, how can blood collectors choose collection targets? How can clinicians make informed decisions about utilization? How can policymakers assess the resiliency of the blood system?

The reasons for the lack of data are manifold. The U.S. is unique among most other high-resource countries in that our blood supply is privately held and decentralized, with strong competition among blood suppliers. This has helped us meet and overcome countless challenges, but it also means that competition coupled with donor recruitment challenges, cost-control efforts and changing medical practices, have contributed to create a challenging landscape. Hospitals are also reluctant to share data about inventory, transfusions and

patient safety. HIPAA, the Health Insurance Portability and Accountability Act, places a premium on patient privacy, making some hospitals reluctant to share data about transfusion rates and hemovigilance, even in aggregate. Also, with no requirements to report transfusion-related data (except in Massachusetts), hospital administrators, stretched thin by other demands, see no benefit in reporting.

The lack of information has affected efforts to evaluate supply and demand for COVID-19 convalescent plasma (CCP) for therapeutic use. While blood centers were heroic in their rapid response to collect CCP, they were unable to monitor quickly evolving national demand. Clinicians seeking access to the product could not ascertain its availability. Uncertainty about CCP inventory and utilization made it difficult to coordinate a measured response.

These questions about data may be reaching a tipping point. HHS is developing a report for Congress about the adequacy of the blood supply, including a specific charge to establish recommendations to ensure the adequacy of the blood supply in the event of public health emergencies. It is worth noting that the committee was already working on the report when the COVID -19 crisis hit; however, since the onset of the pandemic and related shortages, the work has taken on a new urgency. Members of both the public and private sectors are also considering mechanisms to respond to the need for data: Some are looking for ways to tap into transfusion data directly from hospital electronic medical records to alleviate the burden of reporting; others are thinking about ways to adapt existing reporting structures such as the National Blood Collection and Utilization Survey to expand their roles and capabilities. It is my hope that the blood community will follow the model set by the HIV response, with a cooperative effort that benefits the blood industry and helps serve the blood supply needs of the U.S.

This new column will appear regularly. Its purpose is to spark discussions, and the next column will respond to comments made by members of the blood and biotherapies community on social media.