correspondence

Specimens Received as a Critical Indicator for Blood Bank Preparedness in the SARS-CoV-2 Era

Am J Clin Pathol 2020;XX:1-2 DOI: 10.1093/AJCP/AQAA129

To the Editor

The recently published manuscript by Gehrie and colleagues¹ highlights the varying pressures faced by academic medical centers during the ongoing severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic. Building on their benchmarks for preparedness, I would further advocate for blood banks to focus on the preanalytic total number of specimens received to better understand and anticipate the evolving pressures that individual diagnostic laboratories face in the ongoing pandemic **Figure 1**. To best determine blood inventory stocking levels, the trend for total number of specimens received can be overlaid onto state, county, and regional data related to cessation of elective surgical procedures.² These data can help guide inventory level management during the pandemic, noting that there remains a

significant challenge for blood collection centers to maintain critical nationwide blood inventories.³

As the authors point out, determining blood inventory stocks at Level 1 trauma centers during summer months demonstrates an additional complexity.¹ I agree that daily review of blood products used during massive transfusion protocol activations can serve as an additional tool to communicate the appropriate use of limited biologic products **Table 1**.⁴

The authors are to be congratulated for their important contribution to the medical literature, which helps to ensure that scarce medical resources such as blood are utilized in an evidence-based fashion while maintaining adequate supply lines.

Garrett S. Booth, MD, MS

Vanderbilt University Medical Center Nashville, TN



IFigure 1 Total number of blood bank specimens received by Vanderbilt University Medical Center each month.

Table 1 Total Number of Adult Massive Transfusion Protocol Activations at Vanderbilt University Medical Center

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2018	31	16	12	21	24	22	13	27	17	10	25	20
2019	11	10	16	16	19	21	24	30	28	20	19	20
2020	17	19	16	15	32							

References

- Gehrie EA, Tormey CA, Sanford KW. Transfusion service response to the COVID-19 pandemic. *Am J Clin Pathol.* 2020;154:280-285.
- State guidance on elective surgeries. https:// www.ascassociation.org/asca/resourcecenter/ latestnewsresourcecenter/covid-19/covid-19-state. Accessed June 26, 2020.

The Authors' Reply

We greatly appreciate the letter by Dr Booth and the provision of data from Vanderbilt University Medical Center, which shows the impact of the coronavirus disease 2019 (COVID-19) pandemic on a high-volume transfusion service in Nashville, TN. One point that this discussion raises is the importance of developing modalities to rapidly gather and aggregate real-time blood utilization and blood availability data during a crisis. The pandemic has exacerbated the need for these data, as blood needs are changing so rapidly that close coordination between suppliers and transfusion services is essential. Even after the pandemic, it is likely that sharing such data would help with transfusion medicine

- 3. America's Blood Centers, AABB, and American Red Cross release joint statement on the blood supply. https:// americasblood.org/news/joint-statement-on-the-bloodsupply/. Accessed June 26, 2020.
- 4. Whitney GM, Woods MC, France DJ, et al. Reducing intraoperative red blood cell unit wastage in a large academic medical center. *Transfusion*. 2015;55:2752-2758.

quality activities, including performance benchmarking for transfusion services and blood suppliers.

Eric A. Gehrie, MD

Johns Hopkins University School of Medicine Baltimore, MD

Christopher A. Tormey, MD

Yale University School of Medicine New Haven, CT

Kimberly W. Sanford, MD

Virginia Commonwealth University School of Medicine Richmond