

## Value Added

CVCR Newsletter

First Quarter 2024

## First Quarter News

## In this Issue:

Welcome to this quarter's issue of Value Added!

The Center for Value-Based Care Research (CVCR) conducts novel research on interventions that improve value in healthcare. With a mission of making quality healthcare possible for all Americans by conducting research to identify value in healthcare, CVCR seeks to deliver the right care, at the right time, to the right patients, at lower costs.

In this issue, we report on recent studies regarding healthcare delivery.

We hope you enjoy this quarter's updates!

⇒ **CVCR in the News**

⇒ **Featured Publication from Dr. Martinez**

⇒ **Recent Publications**



This past February, investigators, research coordinators, and students from the Center for Value-Based Care Research got together and played bocce!

## CVCR in the News



**Cleveland Clinic Study Identifies Factors Associated With Long-Term Use of FDA-Approved Anti-Obesity Medications**

Cleveland Clinic Newsroom, December 6, 2023

Click [here](#) to read this article

**Study: Odds of success with weight loss drugs lowered if people don't stay on medications**

WKRC, December 6, 2023

Click [here](#) to read this article

Hamlet Gasoyan, PhD

**Patients Hate 'Forever' Drugs. Is Wegovy Different?**

The New York Times, March 24, 2024

Click [here](#) to read this article

**Most adults with obesity are not prescribed obesity medication**

Healio, February 14, 2024

Click [here](#) to read this article

**Featured Publication: Patient Portal Message Volume and Time Spent on the EHR: an Observational Study of Primary Care Clinicians, *J Gen Intern Med***

Kathryn Martinez, PhD

**What prompted you to study this aspect of healthcare?**

Patients are increasingly messaging their physicians via patient portals like MyChart. Some studies suggest that the burden of this increase in messages is not felt equally across clinicians, with some groups spending more time on the EHR responding to messages than others. A potential consequence of this is increasing burnout for some physicians, which is already unacceptably high. We decided to look at whether the volume of messages asking about medical advice was associated with time outside of scheduled hours on the EHR across our primary care practices.



We applied a novel approach to this question by using group-based trajectory modeling. This allowed us to identify distinct groups of physicians based on their incoming message volume over three years.

**What were your major findings?**

We identified three groups of physicians based on their incoming messaging volume. Those in the high-volume group received over 3x more messages per quarter than those in the low-volume group. While messages increased for all physicians over time, the time spent on the EHR outside of scheduled hours did not meaningfully vary by whether the physicians received a lot of messages versus not. Across all clinicians, each additional 10 messages were associated with an average of 12 minutes per quarter of additional time spent on the EHR.

**Was there anything unexpected or novel about your results?**

It was pretty surprising that despite receiving over 3x more messages per quarter, physicians in the high-volume group didn't spend any more time on the EHR outside of scheduled hours than physicians who received far fewer messages. It may be that physicians who receive a lot of messages are just better at responding to them quickly. These high-volume physicians also may encourage patients to contact them through MyChart, essentially self-selecting into the high message volume group.

Finally, while there is theoretically no upper limit to the number of messages a physician can receive per day, there are only so many hours in the day that a physician can spend responding to them. We don't know anything about quality or the speed of the replies to each message, although institutional policy is to respond within three days. It may be that regardless of how many messages a physician gets, they will only dedicate a certain amount of additional time to responding to them.

**What do your findings indicate for the future, either in your research or within the clinical setting?**

Our use of group-based trajectory modeling allowed us to identify the group of physicians who are receiving the most messages, and these physicians can give us important information in future studies. Via qualitative interviews, we hope to learn about their strategies for managing a high incoming message volume, as well as how they convey their communication preferences to their patients. Important, we also must assess these physicians for burnout, especially as message volume continues to rise.

We are currently conducting a study to understand the impact of a new policy that charges patients for sending certain messages. We will measure whether this policy attenuates incoming message volume for these physicians.

You can access this article [here](#). Be sure to look out for more publications related to this topic in the future!

## Check out CVCR's Recent Publications!

- O'Toole, R., Martinez, K. A., Rothberg, M. B., Diiorio, G., Stenehjem, E. A., Ward, K. E., & LaPlante, K. L. **Antibiotics on Demand: Advances in Asynchronous Telemedicine Call for Increased Antibiotic Surveillance.** *Clinical infectious diseases*
- Gasoyan, H., Pfoh, E. R., Schulte, R., Le, P., & Rothberg, M. B. **Early- and later-stage persistence with antiobesity medications: A retrospective cohort study.** *Obesity (Silver Spring, Md.)*
- Sheehan, M. M., Zilberberg, M. D., Lindenaue, P. K., Higgins, T. L., Imrey, P. B., Guo, N., Deshpande, A., Haessler, S. D., & Rothberg, M. B. **Associations between Present-on-Admission Do-Not-Resuscitate Orders and Short-Term Outcomes in Patients with Pneumonia.** *Southern medical journal*
- Gasoyan, H., Anwer, F., Casacchia, N. J., Kovach, J. D., Valent, J., Wang, M., Halpern, M. T., & Rothberg, M. B. **Role of Patient Characteristics and Insurance Type in Newly Diagnosed Multiple Myeloma Care Disparities.** *JCO oncology practice*
- Gasoyan, H., Pfoh, E. R., Schulte, R., Sullivan, E., Le, P., & Rothberg, M. B. **Association of patient characteristics and insurance type with anti-obesity medications prescribing and fills.** *Diabetes, obesity & metabolism*
- Berg, K. A., Bharmal, N., Tereshchenko, L. G., Le, P., Payne, J. Y., Misra-Hebert, A. D., & Rothberg, M. B. **Racial and ethnic differences in uncontrolled diabetes mellitus among adults taking antidiabetic medication.** *Primary care diabetes*
- Martinez, K. A., Montori, V. M., Rodriguez, F., Tereshchenko, L. G., Kovach, J. D., Hurwitz, H. M., & Rothberg, M. B. **Clinician use of the Statin Choice Shared Decision-making Encounter Tool in a Major Health System.** *Journal of general internal medicine*
- Mittman, B. G., Le, P., Payne, J. Y., Ayers, G., & Rothberg, M. B. **Sociodemographic disparities in GLP-1RA and SGLT2i use among US adults with type 2 diabetes: NHANES 2005-March 2020.** *Current medical research and opinion*
- Martinez, K. A., Schulte, R., Rothberg, M. B., Tang, M. C., & Pfoh, E. R. **Patient Portal Message Volume and Time Spent on the EHR: an Observational Study of Primary Care Clinicians.** *Journal of general internal medicine*
- Rothberg, M. B., Hamilton, A. C., Hu, B., Sheehan, M., Fox, J., Milinovich, A., Lisheba, O., Goto, T., Speaker, S. L., & Pappas, M. A. **Impact of Embedding a Venous Thromboembolism Risk Assessment Model in the Electronic Health Record Versus Usual Care: A Cluster-Randomized Trial.** *Circulation. Cardiovascular quality and outcomes*
- Chen, X., Son, R., Xiao, Z., Treise, D., & Alpert, J. M. **Understanding the Design of Fear Appeals by Applying the Extended Parallel Process Model: A Qualitative Analysis of COVID-19 Public Service Announcements.** *American journal of health promotion*
- Martyn, T., Saef, J., Bansal, A., Martinez, K. A., et al. **Patient and Provider Factors Associated With Initiating Sodium-Glucose Cotransporter-2 Inhibitors (SGLT2is) Following FDA Approval for Heart Failure With Preserved and Mildly Reduced Ejection Fraction.** *Journal of cardiac failure*
- Hasegawa, S., Harris, C. M., Gupta, V., Pappas, M., et al. **Clinicians' interpretation of thresholds in hospital anti-tubograms for gram-negative rod infections: A survey and contingent valuation study of hospitalists.** *Journal of hospital medicine*

We'd love to hear from you!

Questions or comments? Email us at [research4c@ccf.org](mailto:research4c@ccf.org) or call 216-445-0719

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