

Value Added

CVCR Newsletter

First Quarter 2022

First Quarter News

Welcome to this quarter's issue of Value Added!

The Center for Value-Based Care Research (CVCR) conducts 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.

In our first story, CVCR investigator **Dr. Elizabeth Pfoh** discusses the impact of medical scribes on provider efficiency and satisfaction in the ambulatory setting.

In our second story, **Dr. Susannah Rose** discusses how the frequency and quality of Plan of Care Visits affects patient satisfaction and readmissions.

We hope you enjoy this quarter's newsletter!

Featured Publication

Adherence to the ADA's Glycemic Goals in the Treatment of Diabetes Among Older Americans, 2001-2018

Le P, Ayers G, Misra-Hebert AD, Herzig SJ, Herman WH, Shaker VA, Rothberg MB

January 2022

Diabetes Care

CVCR CELEBRATIONS

* CVCR's 4th year Medical Student, Priscilla Kim, is the recipient of the **2022 Internal Medicine Warm-Blum Scholars Award**. Priscilla will be presenting her work, 'A risk prediction model to improve efficiency of pneumococcal urinary antigen testing in patients with community-acquired pneumonia,' at the Society for General Internal Medicine conference.

* Residency match day success for CVCR's 2020-2021 medical student researchers:

| | | |
|----------------|--------------------------------------|--------------------|
| Megan Sheehan | University of Pennsylvania | Internal Medicine |
| Debra Linfield | University of Miami Jackson Memorial | Emergency Medicine |

* Dr. Joshua Johnson was awarded a K01 grant from the Agency for Healthcare Research and Quality. This grant will support his work, *Evaluating the Implementation of High Intensity Home-Based Rehabilitation Following Stroke*.

Congratulations to all and best wishes to our students who are leaving!

Recently Published: Reduced Cognitive Burden and Increased Focus: A Mixed-methods Study Exploring How Implementing Scribes Impacted Physicians

Elizabeth Pfoh PhD, MPH

What prompted you to study this aspect of healthcare?

This study was a true collaboration between our research and clinical teams. Dr. Sandy Hong was the visionary who set this study in motion. She was enthusiastic about the impact that medical scribes could have on physicians' levels of satisfaction, burnout, and efficiency. Dr. Andrea Sikon was also a true leader in this project. She was deeply interested in understanding medical scribes' effect on clinicians' wellbeing. Working on this project was an incredible learning experience because I was given a window into how much effort it took to implement medical scribes into primary care.

What did you find most interesting or important?

Speaking with the physicians about their practice was fascinating. They all cared so deeply about their patients and wanted to provide the best possible care. Yet, they all had distinct conversation and documentation styles. It was interesting to see how a single intervention affected the clinicians differently based on their style. If we had just surveyed the clinicians, we would have found that satisfaction improved, but by speaking with them, we discovered the different paths to improved satisfaction.

Is there anything unexpected or novel about this topic?

Our multi-pronged approach allowed us to demonstrate that 1) there was a small but significant decrease in the time spent outside of work on the electronic health record; 2) 76% of clinicians agreed that scribes increased their work satisfaction at 6 months; and 3) while charting time was reduced, the inbox was still a burden. In sum, we found that after implementing medical scribes clinicians worked differently, not substantially less.

Reduced Cognitive Burden and Increased Focus: A Mixed-methods Study Exploring How Implementing Scribes Impacted Physicians

Elizabeth R Pfoh PhD, Sandra Hong MD, Laura Baranek MBA, Michael Rothberg MD, Sarah Beinkampen MHA, Anita Misra-Hebert MD, Susan Rehm MD, Andrea Sikon MD

Medical Care

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

While we were thrilled to publish this study in Medical Care, conducting operationally useful research was intrinsically satisfying. I look forward to working with this exceptional team again and identifying ways to improve clinicians' work life and wellbeing.

You can access this publication [here](#).

Ongoing Work: Plan of Care Visits to Improve Hospital Experience and Quality of Care

Susannah Rose, PhD

What prompted you to work with this area/program within healthcare?

I started this project as a both a leader in the Office of Patient Experience and as a health services researcher in Clinical Transformation. Plan of Care Visits (POCVs) provided a perfect opportunity to study this important new strategy to improve hospital experience and quality metrics. Plan of Care Visits (POCV) is a standardized bedside rounding process in which the daily plan of care is discussed with patients, nurses, and clinicians as equal partners. I was able to work with key leaders across the Enterprise to develop this research, which has not only provided useful, but has also shaped the strategy of implementation here at the Cleveland Clinic. Working on research that is in-flight and has immediate relevance to patients and caregivers is the most exciting and rewarding to me.

What are you finding and/or implementing?

Our first study examines the associations of POCV occurrence as documented in the electronic medical record (EMR) and patient perceptions of POCV with patient experience, measured by the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey and readmissions in a sample of adult patients from May 2019-December 2020. This is a cross-sectional retrospective study. We compared patient characteristics and survey items (HCAHPS-would recommend hospital, teamwork, nurse and doctor communication, and POCV frequency and helpfulness) among three groups of hospitalized patients: no POCV documented, POCV documented for <50% hospital days, and POCV documented >50% hospital days. Logistic regression was used to model the relationship between these groups and 30 day readmission and HCAHPS items. To examine the relationship between patients' perceptions of POCV and these outcomes, top-box scores of patient self-reported POCV frequency and POCV helpfulness were main predictors. All models were adjusted for age, gender, race, insurance, medical/surgical unit, and diagnosis severity score and included random effect to account for patients clustering within hospitals.

Is there anything unexpected or novel about this area of health care and its impact on those who interact with it?

POCVs represent a standardized way to meaningfully partner with patients in discussing their plan of care each day during their admission. Including patients as partners is novel and important, given that many patients report that they feel more passive and often uninformed about their care. POCVs seeks to change this by putting patients at the center. Furthermore, POCVs aim to not only improve communication and partnership with patients, but also with the wider team, including nurses and other healthcare specialists. The success of POCVs is something to be celebrated – in terms of EMR documentation, the Enterprise went from around 50% POCVs completed for each day a patient was admitted, to now almost 85%! That is a phenomenal increase, and now we are focusing on metrics that assess patients' perspectives of POCVs frequency and helpfulness as a result of this current research.

What did you find and what are the implications for clinical care?

Overall, 37,009/174,079 patients (21%) completed post-discharge surveys. But simply completing a POCV wasn't enough. In fact, compared to patients with no POCV documented during hospitalization, patients with >50% and those with <50% POCV hospital days were more likely to be readmitted (OR 1.19 95%CI 1.06-1.34) and (OR 1.15, 95%CI 1.02-1.3) respectively. Patients with >50% POCV were also less likely to give the top-box score for nurse communication (OR 0.94, 95%CI 0.89-0.99) and those with <50% POCV days were less likely to give the top-box score for doctor communication (OR 0.94, 95%CI 0.89-0.99). However, when patients reported that POCV frequency was "always," they were more likely to give top-box scores for nurse communication (OR 4.11, 95%CI 3.87-4.37), doctor communication (4.65, 95%CI 4.36-4.96), teamwork (OR 5.30, 95%CI 4.94-5.68) and "would recommend hospital" (OR 4.56 95%CI 4.23-4.93), and they were less likely to be readmitted within 30 days (OR 0.83, 95%CI 0.74-0.93). Moreover, when patients reported POCVs as "helpful" they were even more likely to give top-box score for nurse communication (OR 6.90, 95%CI, 6.49-7.34), doctor communication (OR 8.56, 95%CI, 8.03- 9.12), "would recommend hospital" (OR 9.13, 95%CI 8.45-9.88) and teamwork (OR 16.38, 95%CI 15.14-17.71), and less likely to be readmitted (OR 0.79, 95%CI 0.71-0.88).

The take-away here: Although documenting POCV in the EMR was not associated with patient experience or reduced readmissions, when patients reported that they found them frequent and helpful, POCV were strongly associated with better patient experience and reduced readmissions. Engaging patients, nurses, and clinicians in daily plan of care discussions at the bedside is a powerful tool to enhance patients' care experiences. Strategies to support the practice of POCV are warranted, including changing workflows to foster greater nurse, patient, and clinician bedside simultaneous communication.

Be sure to look out for updates on this project in the near future!

RECENT PUBLICATIONS

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Bruno B, Steele S, Carbone J, Schneider K, Posk L, Rose SL. [Informed or anxious: patient preferences for release of test results of increasing sensitivity on electronic patient portals](#). Health Technol (Berl). 2022;12(1):59-67.

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