Cleveland Clinic

Center for Value-Based Care Research

Value Added

CVCR Newsletter | Second Quarter 2021

Second Quarter News

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.

In our first story, internist and physician-scientist **Dr. Jessica Hohman** describes her study of encounter characteristics of Advanced Practice Clinicians in comparison to those of Physicians in an adult population.

In our second story, CVCR's investigator, **Dr. Elizabeth Pfoh**, describes her ongoing work as a KL2 scholar. Dr. Pfoh explains her overarching project and describes her planned studies related to treating multimorbidity.

We hope you enjoy this quarter's updates!

Featured Publication

Oral Temperature of Noninfected Hospitalized Patients

Speaker SL, Pfoh ER, Pappas MA, Hu B, Rothberg MB.

JAMA

May 2021

CVCR CELEBRATIONS

Dr. Elizabeth Pfoh was awarded the Excellence in Research Award at the Lerner College of Medicine Class of 2021 Graduation Ceremony on May 15th. Congratulations!

Featured Study: Encounter Characteristics Among APCs and Physicians

Jessica Hohman, MD

Why was this study conducted?

This study was initially conducted to understand the implications of the changing workforce composition in health care. As the population ages and the number of primary care physicians fails to keep up with demand, there has been a growing influx of advanced practice clinicians (APCs) in primary care. Given their shorter training and lower cost, APCs present an appealing way to address the inadequate supply of primary care physicians. Moreover, APCs' shorter and less resource intensive training makes it significantly easier to increase supply to meet patient demand.

Comparing Encounter Characteristics Among Advanced Practice Clinicians and Physicians for Adult Same-Day Visits in Primary and Urgent Care

Jessica A. Hohman MD, MSc, MSc, Aditi Patel MD, Parth Parikh MD, Michael B. Rothberg MD, MPH

Journal of General Internal Medicine

The growth of the APC workforce has raised questions about how APCs perform in day-to-day practice. Although prior studies have suggested that care for straight forward problems is similar, at least as measured by utilization patterns and patient experience, little was known about how their practice differs for care that is more complex and requires diagnostic acumen. Because nuance is hard to appreciate in public use datasets or claims used in other work, our study provides a useful complement. Its real strength is that physicians manually reviewed 1200 charts to capture the complexity of decision-making.

How has the COVID-19 pandemic impacted APCs?

The pandemic has, in many ways, increased the visibility of APCs. Prior to the pandemic, APCs were able to practice with varying levels of independence. While some states allowed for APC independent practice, shortages in frontline providers—especially in the early months of the pandemic—prompted most states to relax supervision rules and allow APCs to practice independently. The pressure to make these changes permanent, has renewed debates around what defines a doctor, naming conventions, patient safety, and training. While independent practice could improve access, especially in underserved areas, questions remain as to whether APC training is adequate to meet the demands of increased scope of practice.

Does care by APCs and physicians produce similar outcomes?

Debates about scope of practice for APCs have too often been oversimplified into a false dichotomy between access and patient safety. Generally, prior studies have suggested that outcomes are more similar than different—the caveat though being that much of that work has been observational, problem specific, and limited in size and outcomes measured. Our findings generally support many of these similarities—for example, both groups ordered the same number of tests and consults. But we also found that physicians more often see patients with problems requiring diagnostic acumen while APCs see more concerns amenable to algorithm-driven care. Moreover, our findings underscore the more nuanced ways that physicians add value—for instance, physicians were almost twice as likely to address an additional concern and 44% more likely to deprescribe an unnecessary medication.

What findings would prompt further investigation? How could your findings impact clinical practice?

This study was cross-sectional and focused on same-day visits to both APCs and physicians, but there is also a need to more closely examine longitudinal differences in care and outcomes in a continuity setting. Given the debates about whether APCs should be able to practice independently, further studies are needed in both contexts. Finally, differences in diagnostic accuracy need to be explored.

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

Ongoing Work: Treating Multimorbidity

Elizabeth Pfoh, PhD

Aging is inevitable, and people contract more diseases as they age. Preventing or delaying disease is possible through primary prevention (e.g., vaccinations, adopting healthy eating habits, and exercising). Primary prevention of future diseases increases in importance as adults' age because of the intragenic interactions that occur within our bodies as they cope with disease. In some instances, having one condition increases the likelihood of having another. For example, having hypertension increases the risk of stroke.

Similarly, when a person has multimorbidity (i.e., two or more diseases), they are at greater risk of acquiring additional conditions. Fifty percent of middle-aged adults and 81% of older adults have multimorbidity, and diseases can occur in predictable clusters. For example, a person who has depression is more likely to also have diabetes. Knowing which diseases a person is at risk for based on their current health status can allow targeted prevention.

My KL2 project will focus on two diseases, depression and obesity. Approximately 2.8% or 9.1 million people in the United States have obesity and depression, and the prevalence of obesity is rising. Obesity and depression are among the top three causes of disability and are major risk factors for premature death. They are also associated with metabolic syndrome and increase the risk of cognitive decline. I hope to explore whether effective treatment of obesity and depression can reduce the risk of other diseases.

By focusing on obesity and depression, I hope to identify ways to improve primary care. This work builds on my prior research focused on understanding the impact of quality improvement interventions on patient outcomes. Previously, I found that depression screening at Cleveland Clinic increased identification of depression and linkage to treatment. In a different study, I found that a system-wide quality improvement program to reduce elevated blood pressure was effective by intensifying patients' medications. In the future, I look forward to collaborating with other researchers and clinicians to develop interventions that improve how we treat patients with multimorbidity to enable them to live healthier, longer lives.

Be sure to look out for publications related to this funded research in the near future!

RECENT PUBLICATIONS

Bernstein E, Bhardwaj N, Pfoh ER, Yudelevich E. A Nationwide Survey of Educational Resource Utilization and Perception Among Internal Medicine Residents. J Gen Intern Med. 2021 Jun;36(6):1598-1604.

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