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.

**Featured Publication**

*Frequency of Use and Outcomes of Colonoscopy in Individuals Older Than 75 Years.*

El Halabi, J, Burke, CA, Hariri E, Rizk, M, Macaron, C, McMichael, J, Rothberg, M

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**CVCR CELEBRATIONS**

- Katie Martinez, PhD received the CCLCM Award for Excellence in Research Education.
- Jessica El Halabi, MD won the Clinical Lower Award at the Annual GME Awards Dinner at the Cleveland Clinic for her work, "Frequency of Use and Outcomes of Colonoscopy in Individuals Older Than 75 Years."
- Nikki Winchester earned the Grant for Emerging Researcher/Clinician Mentorship (G.E.R.M) Program award for her thesis proposal, “Clinical Characteristics, Risk factors, and Outcomes of Patients with Community-Associated *Clostridioides difficile* Infection” under the mentorship of Abhishek Deshpande, MD, PhD.
- CVCR’s students, Nikki Winchester and Ben Mittman, were recipients of the 2023 Internal Medicine Warm-Blum Scholars Award.
- We bid farewell to Moosa Tatar, PhD as he will begin his new job as an Assistant Professor in the Department of Pharmaceutical Health Outcomes and Policy at the College of Pharmacy at the University of Houston.
Congratulations!

What led you to investigate the outcomes of colorectal cancer screening for patients older than 75 with a life expectancy of less than 10 years?

In the most recent USPSTF guidelines, they lowered the age at which to start screening, but maintained the recommendation to conduct “individualized screening” from age 76-84. There is accumulating evidence that the net benefit and cost effectiveness of colorectal cancer screening in this age group is questionable, and clinicians often disregard life expectancy when considering referral for screening colonoscopy.

In fact, this whole study came about because the late father of my mentor - Dr. Rothberg - received a mail invitation from his doctor to come for colonoscopy screening at age 89!

We were interested in examining the frequency of screening colonoscopy for older patients, and the outcomes, and how they differed based on life expectancy. To do this, we included patients older than 75 years who underwent outpatient screening colonoscopy between January 2009 and January 2022. We calculated life expectancy based on a published prediction model.

What did you find?

We found that of colonoscopies performed on patients aged 76 to 80 years, 30% were for patients with a life expectancy of less than 10 years. This proportion increased to 71% among patients between 81 to 85 years, and 100% after 85 years. Furthermore, within 10 days after a colonoscopy more than 1% of patients had an adverse event that required hospitalization.
The risk of such an adverse event increased with age. Serious adverse events leading to prolonged hospitalization (<10 days), an ICU stay, or death, occurred in 2.4/1000 patients aged 76 to 80 and almost 11 per 1000 aged greater than 85 years. Despite subjecting themselves to these risks, only 15 patients (0.2%) were found to have an invasive adenocarcinoma.

Was there anything unexpected or novel about your findings? What additional questions, if any, have arisen since starting the work?

One of the most interesting findings was that life expectancy (based on the model) was an excellent predictor of what patients would do if they had a malignancy. Patients with limited life expectancy rarely opted for treatment compared to those that had a life expectancy of greater than or equal to 10 years. This suggests that life expectancy could be used to help guide decisions about offering colonoscopy at older ages.

Overall, what is the biggest impact from your results and how could the results impact care of the affected population going forward?

The main thing to remember is that before ordering a colonoscopy in patients above the age of 75, clinicians should spend time reviewing the risks and benefits. For patients with a life expectancy of 10 years or more, they should engage in a shared-decision approach before going through this procedure. Older patients of the same age can vary significantly in their comorbidities and quality of life and so chronological age alone is a poor determinant of who should be screened. And in line with the “individualized” approach that guidelines recommend, we should rely more on life expectancy quantified by a patient’s health because it offers a better measure of who is likely to live long enough to benefit from screening -- because at the end of the day, just like any other invasive procedure, it has significant harms, especially as we age.
RECENT PUBLICATIONS


