PharmacoEconomics & Outcomes News 853, p14 - 16 May 2020

COVID-19 testing before endoscopy safe, effective in the US

Testing patients for 2019 coronavirus disease (COVID-19) before endoscopy is an effective strategy to restart endoscopic practice in the US, report researchers from Mayo Clinic in Jacksonville, Florida.

The researchers used a computer model to compare three strategies for COVID-19 testing using polymerase chain reaction (PCR) for patients scheduled to undergo endoscopic procedures during the COVID-19 pandemic: strategy 1: testing all patients within 48 hours, with urgent procedures performed regardless of PCR result using high-risk personal protective equipment (PPE), and semi-urgent procedures performed with a negative result using low-risk PPE; strategy 2: testing for semi-urgent procedures; and strategy 3: endoscopy for urgent procedures only.

The model predicted that PCR testing is a safe and effective intervention to resume endoscopy in semi-urgent and elective cases, requiring expenditures of \$US22 and \$105 in testing per patient for strategies 2 and 3, respectively. This would allow an increase to 19.4% and 95.3% of baseline endoscopies, respectively. Implementing nationwide PCR testing in the US would require \$13 million and \$64 million per week for the two strategies, respectively, with a return of \$165 million and \$767 million to providers, respectively. The numbers of healthcare workers potentially infected in the endoscopy unit on a weekly basis were estimated at 65 and 325 for the two strategies, respectively. "At the present rate of infection in low-prevalence populations, such as our center, this intervention seems safe over a 3-month period," note the researchers.

Corral JE, et al. COVID-19 polymerase chain reaction testing before endoscopy: an economic analysis. Gastrointestinal Endoscopy : 28 Apr 2020. Available from: URL: http://doi.org/10.1016/j.gie.2020.04.049