



## Cleveland Clinic's best practice receives recognition of distinction for innovations in laboratory stewardship



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Distinction awarded to team members at the Cleveland Clinic, Cleveland, Ohio, United States

Clinical laboratory stewardship is a topic of strong global interest, combining patient safety with financially responsible healthcare. Optimized clinical laboratory testing can decrease unnecessary phlebotomy, promote conscientious use of expensive testing, and ensure enablement of evidence-based care improving total cost of care and patient outcomes.

Beginning in 2011, best practices were pioneered at the Cleveland Clinic for application of clinical laboratory stewardship. An interdisciplinary committee for laboratory stewardship was created with representation from clinicians, pathologists, administrators, nurses and other caregivers. The committee began by determination of which tests would not need to be repeated more than once per day. With that information, the committee then worked with their informatics team to build a program that automatically blocks duplicate orders of tests determined to only be needed once per day. Clinicians know right away if there was already a test performed that day, and the results of that test are automatically provided to the ordering clinician, negating the need of the clinician to spend time looking for the results of the test they just attempted to order. For the event that a clinician determined a test had medical need to be repeated, the team developed the ability for the clinical care provider to override the block.

The committee also looked at genetic testing that should only have a need to be tested once in a lifetime. If the information system detects that the genetic test has ever been ordered and resulted on a patient, it will block the attempt to order and will direct the provider to the previous results in the medical record. By blocking a second identical genetic test, not only does the patient avoid unnecessary testing, the clinician and their administrative staff avoid spending time on attempting to obtain prior authorization for the testing. As the committee and the program continued to evolve, more interventions were developed and implemented into practice. The initiative now has more than 10 interventions in use at Cleveland Clinic.

This ground-breaking clinical laboratory stewardship initiative achieved remarkable results. Patient safety was improved through

the reduction in unnecessary clinical laboratory testing. Dr. Gary Procop, MD, MS, Medical Director and Co-Chair of Cleveland Clinic's Enterprise Laboratory Stewardship Committee, explains "It is often unappreciated how repeat testing on a patient without disease can result in false-positive test results, which in turn results in more testing, and possibly unnecessary radiologic studies and treatments." Patients also experience greater satisfaction when they receive only the necessary testing, experiencing less pain and anxiety due to fewer phlebotomy collections.

Clinicians are more confident that their patients are receiving cost-effective laboratory testing, helping to provide relevant information to guide their clinical decisions. The health system provides improved patient experiences with reduction of unnecessary laboratory testing, which helps them to be the site of choice for patients in need of care. The initiative has prevented over 209,000 unnecessary tests, resulting in over \$5.9 million of cost avoidance for payors.

The success of this clinical care initiative required collaboration between many disciplines, including four team leaders who were recognized with the 2019 UNIVANTS of Healthcare Excellence: Dr. Gary Procop, MD, MS, Dr. Robert Wyllie, MD, Director of Medical Operations, Cleveland Clinic, Dr. Anita Reddy, MD, Clinical Co-Chair Laboratory Stewardship Committee, Cleveland Clinic, Dr. Brian Rubin, MD, PhD, Chair of Pathology and Laboratory Medicine Institute at Cleveland Clinic.

### THREE KEY TAKEAWAYS:

1. Optimized clinical laboratory testing is essential to the provision of optimized cost-effective healthcare.
2. Personalized interventions can guide providers to the appropriate test to ensure targeted patient care.
3. Collaboration between clinicians and laboratorians for laboratory stewardship can lead to increased patient safety, improved patient experience and decreased healthcare expenses.