2022 *Choosing Wisely*® Champions

- The *Choosing Wisely*® Champions program
- Recognizes individual clinicians for their contributions to the campaign;
- Inspires other clinicians seeking to implement *Choosing Wisely*® in their own practice;
- Provides society partners an opportunity to celebrate members' contributions to the campaign;
- Demonstrates how the campaign is driving change in health care; and
- Helps clinicians learn from one another by highlighting exemplars.

Gregory Sossaman, MD, MASCP*

gsossaman@ochsner.org

System Chair of Clinical Pathology and Service Line Leader
Department of Pathology and Laboratory Medicine, Ochsner Health

And,

Elise Occhipinti, MD, FASCP*

eliseocchipinti@gmail.com

Chair, Clinical Pathology, Ochsner, Jefferson Highway
Laboratory Medical Director, Ochsner Jefferson Highway
Staff Hematopathologist, Ochsner Health System

Drs. Sossaman and Occhipinti are exemplars of *Choosing Wisely*® values and the application of these recommendations. As the COVID-19 pandemic raged on and laboratories encountered constant supplies shortages, Drs. Sossaman and Occhipinti addressed the situation by adopting *Choosing Wisely*® recommendations and approaches to improve the ability of Ochsner's laboratories to meet the critical testing needs of their patients.

During the most recent *Choosing Wisely*® Champions cycle, Dr. Sossaman, along with Lee H. Hilborne, MD, MPH, FASCP, DLM(ASCP)CM; Barbara Caldwell, MS, MASCP, MT(ASCP)CM; and Steven Kroft, MD, MASCP; drafted "Turning Crisis into Opportunity", an editorial published in the American Journal of Clinical Pathology to highlight how ASCP's *Choosing Wisely*® program could be used to promote the laboratory resource conservation efforts needed for laboratories to deal with the critical shortage of laboratory testing supplies caused by the COVID-19 pandemic.

In addition, Drs. Sossaman and Occhipinti work tirelessly to adopt *Choosing Wisely*® recommendations and values into an aggressive campaign to help Ochsner conserve scarce testing supplies. Their goal was to eliminate rainbow draws, non-essential orders, and extra tubes as well as decrease daily tests and repeat orders. To accomplish this, they worked constantly to educate

and communicate with Ochsner Health providers and hospital administrators of the need to minimize test orders. The results of these efforts significantly reduced demand for testing services and helped conserve scarce laboratory supplies so that they could be prioritized for those patients most in need of testing services. The results of their work were made public when they presented on their initiative during the May 2022 Centers for Disease Control and Prevention Clinical Laboratory COVID-19 Response Call.

ECU Health

Team Members (left to right):

- Yaolin Zhou, MD, associate professor of Pathology and Laboratory Medicine, head of Molecular Pathology and director of Quality and Test Utilization, East Carolina University (ECU)*
- Greeshma Sheri, MD, assistant clinical professor of General Internal Medicine, ECU
- James Manning, MD, ECU Health Hospitalist Medical Director



Email: zhouy20@ecu.edu

In September 2020, East Carolina University Drs. Yaolin Zhou and Greeshma Sheri and ECU Health hospitalist Dr. James Manning partnered to launch an innovative program – Choosing Labs Wisely – to reduce unnecessary repeat daily laboratory testing.

Evidence from studies shows daily lab draws rarely change patient management, require extra time and expense, cause patient discomfort and dissatisfaction and contribute to hospital-acquired anemia and blood transfusions. To accomplish the goal of 20 percent reduction in targeted tests, the Choosing Labs Wisely team used the EPIDEM quality improvement model (available at bit.ly/EPIDEM), which democratizes and demystifies the steps of quality improvement (Exploration, Promotion, Implementation, Documentation, Evaluation and Modification).

With key stakeholders, Zhou, Sheri and Manning shared specialty specific *Choosing Wisely*® recommendations and data that their providers ordered complete blood counts, metabolic panels, magnesium, and phosphorus labs more frequently than outside peers. After months of promoting and obtaining buy-in and approval from clinicians, formal committees, hospital leadership, trainee physicians, nursing, quality, etc., on April 19, 2021, the intervention was implemented, with the removal of the three-times-a-day ordering option. The team developed dashboards to document and evaluate the program's efficacy. From September 2020 to June 2022, there was a 15 to 25 percent reduction in targeted laboratory orders per inpatient day at ECU Health, which should translate into higher patient satisfaction and improved patient care.

Zhou is a past ASCP *Choosing Wisely*® Champion (2017). In addition to presentations to pathology and non-pathology audiences about *Choosing Wisely*®, Zhou presented "Choosing Tests Wisely: What, Why, and How to Make a Difference," for American Society for Clinical Pathology Webcast on March 1, 2018.

"Reducing daily repeat laboratory testing is only the beginning," Zhou said. "The team will continue to make modifications to sustain and expand *Choosing Wisely*® efforts, advancing ECU Health's mission of improving the health and well-being of eastern North Carolina by creating an 'EPIDEMic' of improved patient care."

Heather Signorelli, DO*

hnsignorelli@gmail.com

Vice President and Chief Laboratory Officer, HCA Healthcare

HCA Healthcare (HCA) is the largest health system in the United States, spanning 186 hospitals and more than 2,000 care sites, with massive opportunity for managing laboratory testing at scale. In 2021, HCA Healthcare performed 98.6 million laboratory tests. Based on ASCP's *Choosing Wisely*® campaign, Dr. Heather Signorelli founded and led HCA's Laboratory Stewardship Initiative.

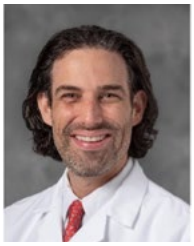
To begin, the ASCP *Choosing Wisely*® guidelines' recommendation against testing CK-MB (for acute myocardial infarction) was prioritized, recommending troponin instead. Prior to Dr. Signorelli's work, more than 800,000 CK-MB tests were ordered at HCA in 2018 alone for MI workup. Dr. Signorelli educated ordering providers about low value tests like CK-MB, and then created test menu decision support to phase out CK-MB. By 2020, there was a 94-percent reduction in CK-MB tests ordered across the enterprise. Using a *Choosing Wisely*® based model, Signorelli then took on other *Choosing Wisely*® tests: respiratory virus panels, pro-Calcitonin, and she also looked carefully at duplicate testing.

Dr. Heather Signorelli is a recognized national leader in the laboratory stewardship movement, the only woman chief laboratory officer in the United States, and has been recognized as a top 25 emerging healthcare leader by Modern Healthcare. Dr. Signorelli has previously been recognized as an ASCP *Choosing Wisely*® Champion (2018). She has been invited to speak on stewardship at the Centers for Disease Control and Prevention and has advised numerous health systems leaders.

David E. Willens, MD, MPH, FACP

DWILLEN1@hfhs.org

Vice Chair for Quality and Clinical Redesign, Department of Medicine, Henry Ford Health

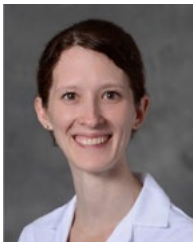


And,

Danielle L. Heidemann, MD, FACP

DHeidem1@hfhs.org

Associate Program Director, Internal Medicine Residency Program, Henry Ford Hospital

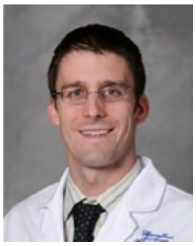


And,

Daniel Moore, MD

DMOORE4@hfhs.org

Inpatient Unit Medical Director, General Internal Medicine, Henry Ford Hospital



And,

Christopher Giles, DO

cgiles1@hfhs.org

Senior Staff Internist, Henry Ford Hospital

Since 2015, as frontline clinicians, Drs. David Willens, Danielle Heidemann, Daniel Moore, and Christopher Giles have been deeply involved in the residency training of Henry Ford internal medicine residents on *Choosing Wisely*® recommendations. For example, the Society of Hospital Medicine – Adult Hospital Medicine *Choosing Wisely*® recommendation is: Don't perform repetitive CBC and chemistry testing in the face of clinical and lab stability. The nominees conducted a seven-month feedback intervention across seven different cohorts of internal medicine trainees. The intervention aimed to make the trainees aware of the excessive efforts/costs in lieu of limited clinical benefits. According to the collected data, the average number of basic metabolic profile (BMP) and complete blood count (CBC) reduced from 1.19+ 0.17 /patient day to 0.91 + 0.15 /patient day; (p=0.0001). This intervention was selected for presentation at two internal medicine meetings.

Since 2019, the nominees have worked with pathologists, managers, and supervisors of the hospital's Pathology Department to organize in-person and virtual workshops for laboratory professionals. These workshops aimed to make laboratory professionals aware of the clinic's workflow, challenges, and expectations around ordering laboratory testing services, and identify occasions where clinicians overutilized or underutilized laboratory services. To the team's knowledge, this is the first and only application of the Value Proposition Canvas in laboratory medicine. This clinician-laboratory collaboration was selected for presentation at two academic meetings.

Division of Quality and Health Improvement (DQHI) and Laboratory Stewardship Subcommittee Department of Pathology, Michigan Medicine

Representatives:

Lee Schroeder, MD, PhD
Associate Professor, Chemical Pathology
Director of Point of Care Testing
Associate Director, Chemical Pathology
Michigan Medicine
Department of Pathology & Clinical Labs

leeschro@med.umich.edu

And,

Scott R. Owens, MD, FASCP
Professor of Pathology
Director, Division of Quality and Health Improvement
Michigan Medicine
Department of Pathology & Clinical Labs

srowens@med.umich.edu

For seven years, the Division of Quality and Health Improvement (DQHI) in Michigan Medicine's Department of Pathology has worked on projects involving operational quality improvement and value creation, aiming to transform the experience of patients at Michigan Medicine. Efforts centered on laboratory stewardship and test utilization are an essential part of DQHI's mission. DQHI uses *Choosing Wisely*® guidelines as inspiration, partnering with colleagues in Internal Medicine and elsewhere to leverage the opportunities identified.

To estimate opportunities for reducing low-value laboratory testing, DQHI and other departmental leaders partnered with the Michigan Program on Value Enhancement (MPrOVE) in a systematic and data-driven approach to identify areas where decision support and other interventions could be pursued using the electronic order entry system (MiChart/EPIC) to promote appropriate laboratory utilization. Among others, opportunities were identified in thyroid disease testing (37 percent of T4 tests were ordered without a prior abnormal TSH within 60 days), celiac disease screening (97 percent not using an available reflex algorithm), and thrombophilia panel testing (up to 27 percent of assays were ordered inappropriately, e.g., for inpatients who are often anticoagulated).

These findings and others led to the implementation of specific MiChart/EPIC interventions, including the development of reflex testing algorithms and decision support tools for thyroid and celiac disease, and the removal of ordering options for thrombophilia testing of anticoagulated inpatients. Preliminary data indicate that these interventions have reduced low-value testing at Michigan Medicine, with a post-intervention increase in appropriate thyroid testing patterns and an effective elimination of thrombophilia testing for anticoagulated inpatients. Demonstrating added value, the use of celiac algorithm appears to have had a normalizing effect on biopsy ordering practices across medical providers.

Geisinger Adult Gastroenterology and Laboratory Medicine

Representative:
Amanda Haynes, DO, FASCP

Division Chief of Clinical Pathology Professional Services, Quality, and Operations
Laboratory Medicine
Geisinger

aehaynes@geisinger.edu

Geisinger Adult Gastroenterology launched a successful *Choosing Wisely*® campaign across the Geisinger health system to address inappropriate use of fecal occult blood testing (FOBT). According to the American Gastroenterology Association guidelines, FOBT should only be used in the context of colorectal cancer (CRC) screening. Despite lack of evidence supporting the use of FOBT in the acute hospital setting, it is commonly used on inpatients for reasons other than CRC screening, such as screening for gastrointestinal bleeding and evaluation of unexplained anemia. Previous studies have described the role of FOBT in the inpatient setting and its influence toward inappropriate clinical decision-making, as well as contribution toward increased hospital length of stay, increased medical costs, and increased patient risk associated with unwarranted medical procedures, such as colonoscopy.

To further complicate the matter, FOBT can be done as a point of care test (guaiac-based) or in the laboratory (enzyme immunoassay, or EIA). Guaiac-based testing is less accurate than EIA, and point-of-care testing is difficult to ensure quality assurance, including competence of testing personnel, expiration-dates on test cards and reagents, and appropriate test ordering and result-entry using electronic health record. FOBT is a test with low specificity, which can result in additional unnecessary testing, and low sensitivity, which can delay appropriate diagnostic workup.

After educating providers and nurses on the coming change, the team removed the FOBT test as an orderable test for hospitalized adults. The inpatient volume of FOBT dropped from approximately 50 per month to about 10 per month.

Janet Simons, MD, FRCPC

janet.simons@providencehealth.bc.ca

Clinical Pathologist and Internist
Clinical Chemistry Laboratory
St. Paul's Hospital at the University of British Columbia

Dr. Simons is an internist and a medical biochemist working in the Clinical Chemistry Laboratory of St. Paul's Hospital at the University of British Columbia. As Dr. Simons works in both internal medicine and the laboratory, she sees problems from both the laboratory and clinical sides. Dr. Simons serves as a physician champion for *Choosing Wisely*® Canada's Using Labs Wisely campaign.

In 2018, she noted that daily complete blood count (CBC) and electrolytes seemed to be getting spontaneously re-ordered despite no clear clinical indication. She discovered that if a provider ordered "Daily CBC and Electrolytes" and did not specify a stop-date, the order would continue until a stop order was specifically placed. She developed a programmatic means of identifying and quantifying these "runs" of daily blood work. Dr. Simons used the R statistical programming language to find and count these runs in order to understand the scope of the problem and even intervene in specific patient scenarios.

In the institution, about 30 patients in the hospital per day had blood collections that were in a run of daily bloodwork lasting 10 or more days, and some runs would extend for months. Many such orders were not indicated. Dr. Simons presented these data to the health system's medical affairs team and to the medical staff at St. Paul's Hospital. She convinced the administration that orders for "daily CBC" or "daily electrolytes" should extend for three days only and then automatically stop, unless specifically reordered. Implementation of this rule led to a 10-percent reduction in ward collections.

Rajan Dewar, MD, PhD, FASCP, and the High Value Care Committee

dewarraj@msu.edu

Chair, Department of Pathology
McLaren Greater Lansing and
Professor, Michigan State University

Dr. Dewar is currently the chair of Department of Pathology at McLaren Greater Lansing Hospital and is co-chair of

the hospital's High Value Care Committee (HVC). At the beginning of the COVID-19 pandemic, unnecessary laboratory testing was at an all-time high (sometimes up to 204 laboratory tests/patient/day). Dr. Dewar studied this data with residents, Drs. Evan Guay and Shane Clark, and presented it to the HVC. As the vice-chair of the committee, Dr. Dewar assists the chief medical officer, Dr. Linda Peterson who chairs the HVC in effective and successful management of laboratory test utilization.

The team successfully initiated and implemented "Pause-The-Draw" campaign based on ASCP *Choosing Wisely*® recommendations whereby the residents think twice and choose wisely before ordering unnecessary tests. As a result of Dr. Dewar and HVC's efforts, the hospital's laboratory utilization metric has decreased from 5.84 per patient day to around 5.1, achieving their stretch goal for the fiscal year 2021.

Through educational campaigns and collaborations with the intensive care unit (ICU), the team has successfully reduced the number of unnecessary ICU Magnesium/Phosphorus testing from 3.96 per patient day to 1.91. In addition, Dr. Dewar has presented on the topic of laboratory utilization in several grand rounds and has actively participated in multi-disciplinary team rounding of the hospital. He has also been invited to present Lab utilization and *Choosing Wisely* concepts at grand rounds for other institutions such as Albany Medical College and at the University of Buffalo.

Rashid Hospital Laboratory Team

Pathology & Genetics Department
Dubai Health Authority

Team Members (clockwise from top left): Rania Medhat Saleim, MD, FCAP; Ali M. Al-Ameen, MD, FICMS; Maya M. Habou, MD; Nahid A. Shaikh, MD; Maryam Mohmmed AlAli, CS; Rami G. Dewair, MT; Ayisha H. Al Hamadi, M.Sc. ; Deepa V. Rao, MD; Akram H. Mekki, M.Sc.

Representative:
Dr. Rania Medhat Seliem
Consultant Hematopathologist
Head of Pathology Section, Rashid Hospital
Pathology and Genetics Department
RMSeliem@dha.gov.ae

With 762 beds, Rashid Hospital (RH) is the largest government hospital in Dubai, and it is the largest emergency department in the United Arab Emirates. The Rashid Hospital laboratory team initiated an intensive a hospital-wide educational program in the form of educational lectures series, dedicated clinical meetings, and monthly newsletters. The newsletters had a regular section about *Choosing Wisely*® to share all of the *Choosing Wisely*® recommendations with the entire hospital clinical team.

In regard to recommendations of thyroid function testing, the laboratory has changed the practice of ordering a panel of TSH, T3, and T4 as an initial screening to ordering only TSH for initial evaluation of patients suspected with thyroid disease. This reduced unnecessary testing of tri-iodothyronine (Free T3) by 90 percent in a span of nine months. The laboratory also actively changed the way the test order is reflected in its LIS to facilitate the process of implementation of the improvement. In regards to recommendations of the use of CRP as the test of choice to detect acute phase inflammation instead of ESR to look for inflammation in patients with undiagnosed conditions, continuous education and follow up led to the reduction of ESR testing by than more 50 percent in the emergency department.

In regard to recommendations of the blood typing and crossmatch orders, the laboratory collaborated with Rashid Hospital through the Blood Utilization Committee and implemented a Clinical Practice Guideline to improve the ordering patterns of blood and improve its utilization. This led to dramatic improvement in the CTR from 2.5 to 1.3 for in-patients and ED. Type and Screen order has been implemented and it is prioritized in ordering based on the clinical practice guidelines.

Sentara Healthcare

(From left to right):
Sara Shumate, Dr. David Seidman, Pey Tajvidi, Cristi Rigazio, Ryan Montgomery, Diane Washburn, Asmara Khan, Marigrace Daniel, Ian Noga, Cheryl Orr, Dr. Timothy Walls, Not pictured: Sophia Buckaloo

Representative:
Marigrace Daniel, MT(ASCP)
Clinical Specialist, Processing
Sentara Healthcare - Laboratory Services

MSDANIEL@sentara.com

Sentara Healthcare started a multidisciplinary Test Utilization Committee in March 2019, to implement high quality and cost-effective strategies of testing patterns in patient care. Clinical providers across the health system and laboratory leaders used evidence-based practice to make determinations regarding the safe and effective use of diagnostic test requests in optimizing patient treatments and outcomes.

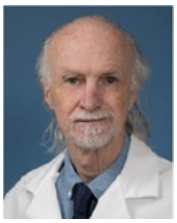
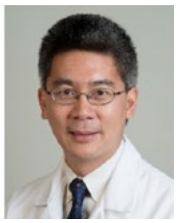
Committee members utilized the *Choosing Wisely*® recommendations to drive the analysis of data to create a dashboard that would show process metrics and key outcomes. This data was used to define opportunities in ordering systems and to assist with determining the value of adding, eliminating, or modifying existing tests and order sets. Utilization trends were analyzed, and service line leaders were engaged to determine appropriateness in test utilization. Committee members include clinical provider key-stakeholders and other system leaders who could provide education, not limited to presentation of the committee decisions and data trending.

The committee decided to implement the removal of obsolete tests from order sets in January 2020, and the laboratory test compendium, with the first communication of the project occurring June 2020. Communication of the removal of CKMB, for the more specific Troponin T, saw a significant decrease in ordering from 5144 tests per month to 410 tests per month by February 2022. Amylase test ordering saw a decrease from 497 tests per month to 226 tests per month. The obsolete test list includes lower volume testing; MTHFR, Homocysteine, Reverse T3, and Plasma and Urine Catecholamines.

UCLA Health Team

Team Members (clockwise from top left):

- Alyssa Ziman, MD, CLIA Medical Director, Clinical Laboratory at Ronald Reagan UCLA Medical Center, Pathology and Laboratory Medicine
- Thomas A. Drake, MD, CLIA Medical Director, Bruin University Reference Laboratory
- Eric M. Cheng, MD, MS, Chief Medical Informatics Officer
- Arash Shamsian, MPH, Medical Informatics Specialist, Information Services & Solutions,
- Charlemagne Isip, Computing Resource Manager, Pathology and Laboratory Medicine
- Hazel Oza, PMP, Ambulatory Physician Informatics Portfolio Manager, Information Services & Solutions
- Bernard J. Katz, MD, MBA, Medical Director



AZiman@mednet.ucla.edu

UCLA Health improved vitamin D test utilization following the *Choosing Wisely*® campaigns aimed at optimizing appropriate utilization of 1,25-dihydroxyvitamin D and 25- hyroxyvitamin D levels. Initial assessment of ordering practices identified several typesof barriers to proper ordering: wrong test orders, test orders that were not clinically indicated and test orders that lacked appropriate clinical information to justify the order. For the first issue, naming convention and sorting strategies were used to provideadditional guidance at the time of test selection. For the latter two, alerts were implemented when the electronic health record (EHR) could not identify a reason to justify repeated testing; when required, the EHR would present ordering guidelines at the timeof test order, and the opportunity to enter additional clinical information that justifiestesting or cancel the test.

A multidisciplinary collaborative effort with pathologists, clinical chemists, physician informaticists, ambulatory care physicians and IT was enlisted to lead this project which highlights the Vitamin D focused *Choosing Wisely*® campaigns by the Endocrine Society American Society for Clinical Pathology, and the American Academy of Pediatrics. Thes test ordering strategies and associated educational efforts increased both the awarenessand the appropriateness of vitamin D ordering practices which resulted in a sustained 15-percent and 28-percent reduction in 1,25-dihydroxyvitamin D and 25-hyroxyvitamin D orders, respectively, since implementation. This Vitamin D Utilization Project illustrates how a complex healthcare organization can implement and sustain a patient-centered, evidence-based multidisciplinary approach to Vitamin D test utilization while improving patient care, resource utilization and EHR documentation, and fostering a culture of teamwork to improve performance.

**The individuals who have an asterisk by their name were selected to present their work at the ASCP 2022 Annual Meeting Choosing Wisely® Champions session on September 7th.*