

CHOOSING WISELY[®]

A SPECIAL REPORT ON THE FIRST FIVE YEARS

CHOOSING WISELY: A SPECIAL REPORT ON THE FIRST FIVE YEARS

“I would propose that each specialty society commit itself immediately to appointing a blue-ribbon study panel to report, as soon as possible, that specialty’s ‘Top Five’ list... The Top Five list would consist of five diagnostic tests or treatments that are very commonly ordered by members of that specialty, that are among the most expensive services provided, and that have been shown by the currently available evidence not to provide any meaningful benefit to at least some major categories of patients for whom they are commonly ordered.”

Howard Brody, MD

[Medicine’s Ethical Responsibility for Health Care Reform — The Top Five List](#)

The New England Journal of Medicine

2010

A SHORT HISTORY. A BRIGHT FUTURE.

In 2010 Howard Brody, MD, published “Medicine’s Ethical Responsibility for Health Care Reform—The Top Five List” in the *New England Journal of Medicine*. In the piece, Dr. Brody called on U.S. medical specialty societies to identify five tests and treatments that were overused in their specialties and did not provide meaningful benefit for patients. At the same time, the National Physicians Alliance (NPA) piloted the “Five Things” concept through an ABIM Foundation grant and created a set of three lists of specific steps physicians in internal medicine, family medicine and pediatrics could take in their practices to promote the more effective use of health care resources. These lists were first published in the *Archives of Internal Medicine*.

Building on the work of Dr. Brody and the NPA, in April 2012 the ABIM Foundation and Consumer Reports formally launched the *Choosing Wisely* campaign with the release of “Top Five” lists from nine specialty societies at the National Press Club in Washington, DC. The widespread media coverage from nearly every top-tier outlet, along with positive reaction from the health care community, inspired 17 additional societies to join the campaign and release lists in February 2013.



Daniel Wolfson speaks at press conference February 2013

Since that time participation in *Choosing Wisely* has grown rapidly. More than 80 specialty societies have joined the campaign from a wide swath of disciplines, expanding beyond physician-led organizations to include nursing, dentistry, physical therapy and pharmacy. These groups have generated an impressive library of potentially overused tests and treatments, collectively publishing more than 500 recommendations they say clinicians and patients should discuss.

CHOOSING WISELY BY THE NUMBERS

- Over 80 specialty society partners
- 525 specialty society recommendations
- Over 70 consumer and employer groups
- 29 current and former grantees
- 45 Choosing Wisely Champions
- 1,330 journal articles referencing *Choosing Wisely* in 2016*
- 1.9 million visits to www.choosingwisely.org in 2016
- 19 countries that have created their own *Choosing Wisely* campaigns

*Based on a Google Scholar search for “Choosing Wisely” and health



Increasing Clinician Awareness

More than 80 medical society partners have joined the campaign and collectively published more than 500 recommendations of unnecessary tests and treatments they say should be discussed.



#choosingwisely



Going Global

Nineteen other countries have started their own campaigns inspired by *Choosing Wisely* and its ideals.



#choosingwisely

Karen Cox, President-elect of the American Academy of Nursing, shares why she thinks it has been valuable for AAN to participate in *Choosing Wisely*.



To support patients in these conversations, Consumer Reports, in close collaboration with specialty societies, has published more than 100 patient-friendly brochures and disseminated them through a broad coalition of more than 70 consumer groups and employers.

Clinicians and patients all across the United States – and now the world – are engaging in conversations about avoiding unnecessary care thanks to the efforts of medical specialty societies, health systems, clinical practices, consumer groups and community collaborations to advance *Choosing Wisely*. This special report highlights their stories.

INCREASING AWARENESS. CHANGING ATTITUDES.

A 2017 survey commissioned by the ABIM Foundation found that more than three out of four U.S. physicians said the frequency with which doctors order unnecessary medical tests and procedures is a serious problem for America's health care system—and 69 percent said that the average physician orders unnecessary medical tests and procedures at least once a week.

The survey also found that more than half of physicians think they are in the best position to address the problem and have ultimate responsibility for making sure patients avoid unnecessary care. Physicians who reported exposure to the campaign are more likely to have reduced the number of times they recommended a test or procedure in the last year because they learned it was unnecessary (59 percent vs. 43 percent).

There is additional evidence showing that these recommendations are working. For example, [one study](#) found that more than 92% of physicians in primary care, medical specialties, and surgical specialties agreed or somewhat agreed that *Choosing Wisely* was a legitimate source of guidance. The same study reported that 75.1% of primary care physicians reported they agreed or somewhat agreed that *Choosing Wisely* empowered them to reduce the use of unnecessary tests and procedures.

A study published in the *Journal of the American Board of Family Medicine* found that while overall awareness of *Choosing Wisely* among primary care physicians was about 40%, those who had heard of the campaign “were significantly more likely to report reducing ‘the numbers of unnecessary tests or procedures in the past 12 months.’” Another study found 76% of urologists agreed the recommendations from the American Urological Association were helpful to their practice.

New studies revealing *Choosing Wisely’s* influence in increasing awareness and changing attitudes about the need to reduce overuse continue to be published on a regular basis. Illuminating these statistics are the clinicians and stories behind them, such as Barry Meisenberg, MD, chair for Quality Improvement and Healthcare Systems Research at Anne Arundel Medical Center, who shared that *Choosing Wisely* had become so ingrained in the organization’s culture that it has become shorthand for all efforts to eliminate unnecessary care institution-wide.

CLINICIANS LEADING THE WAY

The success of the *Choosing Wisely* campaign is built upon the leadership of its more than 80 medical society partners, many of which have taken steps to educate their members about overused tests and treatments in their specialty, and how they can put the campaign’s ideals in action. Examples include:

The American College of Radiology: R-SCAN

Created by the American College of Radiology, R-SCAN is a platform enabling clinicians and radiologists to collaborate on projects to improve imaging utilization, based on 11 *Choosing Wisely* imaging recommendations. Supported through funding from the Centers for Medicare & Medicaid Services’ Transforming Clinical Practice Initiative (TCPI), R-SCAN includes a step-by-step guide with resources to help referring clinicians and radiologists through each phase of their project.

Max Wintermark, MD, chief of neuroradiology at Stanford University and clinical advisor for R-SCAN, [helped design and pioneer](#) the platform after noting the prevalence of imaging tests among the library of *Choosing Wisely* recommendations.



Max Wintermark, MD

“We saw an opening to work with our peers to explore why providers order unnecessary imaging and ways to better align patient care with evidence-based practices,” he said. “We wanted to play a proactive role in promoting appropriate use of imaging.”

For example, Alexandre R. Frigini, MD, a radiologist at Baylor Medical College, and his team [used R-SCAN to focus on the American College of Chest Physicians/American Thoracic Society recommendation](#) against using CT angiography to evaluate for possible pulmonary embolism in patients with a low clinical probability and negative results of a highly sensitive D-dimer assay.

Dr. Frigini retrospectively reviewed 100 cases and found 25 tests were not warranted. To address this overuse, clinicians received education through emergency medicine grand rounds that included a review of *Choosing Wisely* and emergency medicine guidelines for ordering CTs. The chief of emergency medicine then sent emails to clinicians as a follow-up.

Shortly after the educational intervention, the team identified 100 new cases and rated them for appropriateness. Comparing their baseline to post education results, the team had reduced inappropriate orders by half – finding 12 tests unwarranted.

In addition to improving the care they deliver to patients, the R-SCAN activity allows ABIM board-certified physicians to earn 20 Practice Assessment MOC points and Patient Safety MOC credit to improve the quality of patient care in their practice while working collaboratively with radiologists. Also, R-SCAN participating practices can earn Improvement Activity credit under the CMS Quality Payment Program for completing a project.

The Society of Hospital Medicine

The Society of Hospital Medicine (SHM) released two lists of overused tests and treatments – one for adults and one for children – at a national press event in February 2013. To help propagate the recommendations, SHM created a [Choosing Wisely Case Study Competition](#), declaring grand prize and honorable mention winners in both adult and pediatric categories. Grand prize winners include:



Hyung (Harry) Cho, MD

Adult: Hyung (Harry) Cho, MD, Director of Quality and Patient Safety at Icahn School of Medicine at Mount Sinai, launched a quality improvement initiative to eliminate the [inappropriate use of urinary catheters and related catheter-associated urinary tract infections](#) (CAUTI). The educational mnemonic “NO TUBE” reminded hospitalists of the six acceptable indications for urinary catheters, and was reinforced via education and feedback given to medical directors. Over a five month period, catheterization rates dropped from 935 to 772 catheter days per month, and catheter-associated urinary tract infection rates were reduced to almost zero, decreasing from 2.85 to 0.32 per 1,000 catheter days.

Pediatric: Amanda Schondelmeyer, MD’s project at Cincinnati Children’s Hospital Medical Center organized nurses, residents, and hospital medicine attending physicians in an effort to reduce continuous pulse oximetry (CPOx) use to align with an [SHM Choosing Wisely recommendation](#). This work included development of consensus-based criteria for CPOx discontinuation; dissemination of a summary and rationale of local and new guidelines during meetings, educational conferences, and shift handoffs; improved communication between team members prompted by order set changes and RN sign-out tools; and engagement of all staff members through biweekly or monthly feedback, in addition to a resident physician quality improvement contest. The initiative reduced median time per patient on CPOx by about 7 hours (70%) within 3 months of improvement activities and sustained that reduction for more than a year following implementation.

SHM also promotes the campaign through its journal, the *Journal of Hospital Medicine* (JHM), and advances awareness of its *Choosing Wisely* recommendations and research on overuse in its specialty through the section “Things We Do For No Reason.” JHM also hosts a monthly [Twitter chat](#) with authors of recently published papers, providing CME credit for participants.

The American College of Physicians: High Value Care Initiative

In early 2017, the American College of Physicians (ACP), which was among the first nine specialty society partners of *Choosing Wisely*, released an updated series of free online cases through its High Value Care (HVC) initiative in support of the core concepts of the campaign. (The dissemination of the initial HVC cases was supported by the ABIM Foundation.)

“Through a variety of interactive elements, the cases highlighted in the modules help clinicians consider the benefits, harms and costs of tests and treatment options for common conditions to improve health and eliminate waste,” says Cynthia Smith, MD, Vice President of Clinical Programs at ACP. “More than \$750 billion annually is spent on wasted care. Through the *Choosing Wisely* campaign and ACP’s HVC initiative, the organization is committed to doing its part to help bend that cost curve and to reduce the unsustainable financial burdens on our patients while improving patient outcomes. These modules instruct physicians how to make decisions that result in improved patient outcomes while simultaneously reducing unnecessary tests and treatments. The cases are accompanied by links to practical take-home tools designed to make it easier to integrate these new approaches into practice.”

The [five topics](#), which take between 30 to 60 minutes each to complete, are offered to clinicians for free CME credit and ABIM/ABMS/ABP Maintenance of Certification points.

American Society for Clinical Pathology

The American Society for Clinical Pathology (ASCP) released its first list of five recommendations at a national press event hosted by the ABIM Foundation and Consumer Reports in February 2013. It has since released subsequent lists in 2015 and 2016, bringing the total to 15 recommendations of overused or unnecessary tests and treatments in pathology.

A former *Choosing Wisely* grantee, ASCP developed a toolkit to help educate members on its recommendations so they can implement them in practice. The toolkit includes template emails that can be customized and shared with colleagues, as well as a series of short educational videos and podcasts on the campaign and specific recommendations.

ASCP has also created a free course entitled “*Choosing Wisely: How Pathologists Can Influence Appropriate Testing*” for members to earn CME.



ASCP has recognized many of its members for their outstanding contributions to advancing the campaign, including Meghan Kapp, MD (Vanderbilt), Christopher Polage, MD (UC-Davis) and Jack Jordan, MA (Henry Ford Health System) (L–R), pictured here with ASCP’s Lee Hilborne, MD.

CHAMPIONING *CHOOSING WISELY* IN PRACTICE

In early 2016 the ABIM Foundation announced a new component of the Choosing Wisely campaign—the [Choosing Wisely Champions program](#), a national initiative to recognize clinicians that are leading efforts to reduce overuse and waste in medicine.

Nearly two dozen societies are participating in the program, and many have identified Champions making significant contributions to advancing Choosing Wisely in their specialty.

Choosing Wisely Champions:

Patrick Hughes, MD | American Society of Echocardiography



Patrick Hughes, MD

Patrick Hughes, MD, a cardiologist at UW Health and associate professor of medicine at the University of Wisconsin School of Medicine and Public Health, found eight years ago that roughly one-third of outpatient stress tests at UW Health weren't recommended because the patients were too low-risk to benefit.

In response, Dr. Hughes and his colleagues developed a tool called “The Guide to Ordering Stress Tests For Suspected Coronary Artery Disease” to help referring physicians recognize when a stress test may not be appropriate for a patient – either because the patient was too low-risk for the test to be helpful or at such high risk that a stress test might actually be harmful.

The tool Dr. Hughes helped develop is distributed regularly to all providers who refer patients to UW Health for stress testing in the echolab, and accompanied by an introductory letter that provides context of how appropriate-use criteria can help avoid overuse.

“The tool, in combination with other initiatives, has worked really well. We saw our overuse of outpatient stress tests with imaging of any form drop from roughly 33 percent to 5 percent,” he said.

Dr. Hughes said faculty members in the family medicine training program tell him that they've posted the tool on their bulletin board and refer to it regularly. He also shared that there has been a noticeable decrease in patients who come for stress tests when they would be better served in the ED.

“When you look at the people ordering the tests, they're really just trying to do what they think is best,” he said. “And what they think is best is in part based on observing what their colleagues are doing. There can be habits of practice that develop in a community that are self-perpetuating. It's been really gratifying to see how much of an impact we've been able to make and the fact that clinicians are very receptive to getting help on how to make wise choices.”

A copy of “The Guide To Ordering Stress Tests For Suspected Coronary Artery Disease” is available at www.heartscholars.com.

Eric Anthony Lee, MD | American Geriatrics Society

As co-chair of the High Risk Drugs in the Elderly Committee for Kaiser Permanente, Southern California, Eric Anthony Lee, MD, is a recognized authority on appropriate prescribing for older men and women.

“Often patients will ask for medications for very understandable reasons,” said Dr. Lee, the Chief of General Internal Medicine at Kaiser Permanente West Los Angeles. “Maybe they saw an ad on TV for a miracle sleeping aid. Or, they’ve heard from friends about antipsychotics to help patients with dementia. But we know those aren’t always appropriate for patients – particularly those at risk for functional decline or frailty. I am responsible for communicating the rationale behind appropriate prescribing for physicians working within the Kaiser Permanente system in Southern California, so I educate my colleagues on which medications might lead to more harm than good, reminding them that we don’t always need to reflexively give medications for certain concerns.”

Dr. Lee said that in addition to giving lectures to his colleagues throughout Southern California, a lot of his work focuses on setting and communicating expectations to patients and their family members.

“If one takes the time to let patients and their families know about the risks of the medications – such as that antipsychotics can be harmful – and to also let them know about the literature behind efficacy and safety of medications, we can typically reduce their use,” he said. “But this can sometimes be difficult when families are desperate because their loved one is not doing well.”

In addition to his work involving medication safety, Dr. Lee also helped update Kaiser Permanente’s diabetes hemoglobin A1c reference range to be age-appropriate and developed delirium-prevention protocols. His research related to glycemic control for patients with diabetes aligns with the *AGS’ Choosing Wisely recommendation* to avoid medications other than metformin to achieve hemoglobin A1c less than 7.5% for most patients, instead aiming for moderate control.

“Physicians have been very supportive of *Choosing Wisely* because sometimes we feel like we’re overprescribing, and we do it because we think that’s what the patient or their family wants,” he said. “But most of us realize sometimes these medications are given reflexively versus having true data. Permanente physicians quote the *Choosing Wisely* campaign all the time. We’re really here to give the most appropriate care.”

Societies that have announced *Choosing Wisely* Champions include:

AMDA – The Society for Post-Acute and Long-Term Care Medicine

American Academy of Allergy Asthma and Immunology

American Association for Pediatric Ophthalmology and Strabismus

American College of Radiology

American Geriatrics Society

American Medical Society for Sports Medicine

American Society for Clinical Pathology

American Society of Echocardiography

American Society of Hematology

American Society of Nuclear Cardiology

American Urological Association

EMPOWERING PATIENTS IN *CHOOSING WISELY*



Eric Barbanel, MD

Eric Barbanel, MD, a Crystal Run Healthcare physician in Middletown, N.Y., said he spends as much time these days explaining to patients why they don't need medications as he does prescribing them.

"Sometimes they ask for an antibiotic before they even say hello," he said. But Dr. Barbanel has a message for them: More medicine is not always better medicine.

Dr. Barbanel is determined to have his patients and their families understand that many types of care they're used to receiving—including care that he used to deliver himself—may not be necessary.

To back that up, he points to several brochures on the wall of the exam room: If you've just hurt

your lower back, you probably don't need an MRI. If you're here for a routine physical, there's little point to an EKG. And antibiotics? They're useless against a cold.

Because the posters are produced by Consumer Reports and specialty society partners, patients understand they are getting evidence-based advice from credible sources.

"When I talk it through, they get it—95 percent of the time, we're able to come to a meaningful conclusion," said Dr. Barbanel. "I think my care has improved as a result, and my patients are happy."

Dr. Barbanel relies on a number of *Choosing Wisely* resources created by Consumer Reports and specialty society partners in his conversations with patients. Over the past five years, Consumer Reports has assembled a nationwide network of more than 70 employers, providers, regional collaborations, and nonprofit groups that help it reach consumers at work, in the community, or at the doctor's office.

Barbanel's office wall displays just a small sampling. Consumer Reports has collaborated with specialty medical societies to create more than 120 plain-language brochures (in both English and Spanish) to help patients and their families have well-informed discussions with their clinician about possibly unnecessary care and the alternatives. In addition to the posters, Consumer Reports has also created a series of "5 Questions to Ask" posters on topics such as back pain, antibiotics, medical tests, and others, as well as videos, rack cards, and a popular "5 Questions" wallet card.

Beyond individual clinician's offices, many large organizations and employers are using *Choosing Wisely* materials as part of patient education efforts, including IBM, Chrysler and U.S. Bank; healthcare systems such as Kaiser Permanente and Group Health; universities such as Ohio State, George Washington, and Duke; and government agencies from Palo Alto to Rhode Island to the Department of Veterans Affairs. The materials have also had widespread international appeal, particularly in Mexico and Argentina.

In addition to creating patient-friendly materials, Consumer Reports has also utilized both its print and online presence to reach large numbers of the public. Articles on avoiding overuse of antibiotics, imaging or drugs for pain management have appeared in Consumer Reports magazine, which has a circulation of about four million. Each week Consumer Reports takes to Twitter to promote #ChoosingWisely Wednesday, featuring clinicians and patients who are actively engaged in the campaign and promoting the “5 Questions” wallet card.

Dr. Barbanel says *Choosing Wisely* and the information from Consumer Reports and specialty societies has changed the way he practices and interacts with his patients.

“*Choosing Wisely* gave me a lot of confidence in my ability to tell patients that I’m working on their behalf to reduce unnecessary care,” Dr. Barbanel said. “Doctors think it takes so much more time to talk patients out of something they want, and that agreeing to order a test makes everyone happy. But I’ve found that those conversations are not usually that time-consuming; and once you have a conversation about one unnecessary test, if you have a relationship with your patients, they understand why you’re not ordering a different test. And when you don’t order a test, you save the post-visit time you would have spent reviewing the results.”

COMMUNITIES AND COLLABORATIONS

In early 2013, the Robert Wood Johnson Foundation (RWJF) provided \$2.3 million in funding to support 21 projects led by state medical societies, specialty societies and regional health collaboratives to help educate physicians about the recommendations and build skills to have conversations with patients about the care they need. Highlights of their accomplishments are articulated in the report, “[Advancing the Choosing Wisely Campaign in Clinical Practices and Communities](#).”

In spring 2015, the ABIM Foundation—with an additional \$4.2 million in funding from RWJF—awarded a new round of grants to support seven initiatives focused on reducing utilization of inappropriate tests and treatments. Each initiative includes delivery systems, hospitals and/or medical groups collaborating with multi-stakeholder community-based groups and physician-led organizations. All grantees are working to reduce the use of three tests, treatments or procedures—including antibiotics to treat viral infections in adults—by 20 percent.

Lead grantee organizations include:

- Greater Detroit Area Health Council
- Integrated Healthcare Association
- Maine Quality Counts
- North Carolina Healthcare Quality Alliance
- University of California, Los Angeles/ Los Angeles Department of Health
- Washington Health Alliance
- Wisconsin Collaborative for Healthcare Quality

Many projects are already showing signs of success. Highlights include*:

California

The Los Angeles Department of Health (LA DHS), a UCLA partner, has dramatically reduced the number of pre-op office visits and tests for patients undergoing cataract surgery:

- 36.99% decrease in X-rays
- 92.23% decrease in office visits
- 83.16% in EKG tests
- 87.15% decrease in lab tests

The process for improvement included the use of a tool that helps define how to improve patient experience, care transitions, patient flow and publicly reported data. This tool helped the group create new pre-operative guidelines and change cataract surgery requirements and workflow. Additionally, a champion resident physician and department chairs emailed all ophthalmology and anesthesiology physicians.

Hear more from Eric Wei, MD, one of the physicians working on the LA DHS project.



Detroit

In Detroit, Greater Detroit Area Health Council's (GDAHC) clinical partners have already met the goal reduction for three of the six recommendations they are collectively working on, including:

Detroit Medical Center (DMC PHO)

- 64.06% reduction in antibiotic use

Henry Ford Health System

- 67.89% reduction in antibiotic use
- 35.1% reduction in vitamin D tests

**All decreases are relative changes to baseline, and not absolute.*

At Henry Ford, the CMO of Primary Care regularly receives clinic- and physician-level performance data on the three *Choosing Wisely* measures. She reviews it and shares it in person and by email with physicians-in-charge, department heads, and group practice directors. Updated performance data is also shared with clinicians monthly to drive improvement. Additionally, Henry Ford uses best practice alerts and clinical decision support (CDS) and communication with providers and consumers. As part of the CDS, providers must complete an additional screen to order a test or treatment that violates the standard, and patient materials created by Consumer Reports and specialty societies are embedded in best practice alerts so providers can print and share them with patients and families. These interventions have helped Henry Ford reach its goal for reducing antibiotics and imaging for Vitamin D testing.

GDAHC's other clinical partner, Detroit Medical Center Physicians Hospital Organization (DMC PHO), has met its 20% goal reductions in antibiotics and imaging for low back pain. At DMC PHO, representatives routinely review *Choosing Wisely* materials with physicians, and its medical director emphasizes the program at his visits. DMC PHO uses paper-based CDS that is emphasized by medical assistants working with clinicians. Posters at points-of-care have also been provided to offices.

North Carolina

In North Carolina, Cornerstone Health Care, a rural 275-physician group, has reached its goal of reductions in all three priority areas, including:

- 29.12% decrease in antibiotic use
- 34% decrease in DEXA scans
- 90.96% decrease in annual Pap tests.

Cornerstone achieved these reductions by engaging a multidisciplinary quality committee, developing formal pathways for reducing the three targets, making changes to order sets, using best practice reminders and giving provider feedback. Feedback was provided at biannual visits, presented at service lines and incorporated into quality reporting.



Vincent Costella, PA,
Cornerstone Health Care



Heather Spry, MD,
Cornerstone Health Care

Washington

In Washington State, partner Kaiser Permanente Washington (formerly Group Health) utilized several interventions to reduce antibiotic use by 35%, including:

- meeting with providers in areas where rates of antibiotics use for viral upper respiratory infection are significantly higher
- emailing all urgent care and CareClinic providers about their rates
- implementing new reporting
- using software to highlight variation and improvement over time
- incorporating antibiotic goals, reporting and tools into orientation for new CareClinic providers
- using the measure for variable compensation in urgent care
- including peer comparison rates by clinic in an annual resource stewardship dashboard for primary and urgent care

In addition, Kaiser Permanente Washington worked to reduce too-frequent Pap tests after discovering significant overuse for women ages 21 to 65. An electronic trigger tool was implemented that gave clinicians data about doing Pap tests too frequently. Clinicians who ordered inappropriate tests received messages three days later with information about the evidence against overtesting, including the *Choosing Wisely* recommendation, as well as an invitation to have a conversation with a colleague. The intervention resulted in a 16% reduction in too-frequent Pap tests.

Wisconsin

In Wisconsin, clinical partners Froedtert and Medical College of Wisconsin (F&MCW) and Monroe Clinic have achieved reductions of greater than 20 percent in five of their six priority areas, including:

F&MCW

- 41.75% in antibiotic use
- 60.71% in imaging for low back pain
- 46.27% in inpatient blood utilization

Monroe Clinic

- 44.28% in antibiotic use
- 34.35% in headache imaging

F&MCW has employed standardized staff-assisted workflows, decision support tools, comparative provider reports, compensation incentives and patient materials. It also changed order defaults for blood utilization. Monroe Clinic has used provider and patient education and unblinded provider feedback.

HEALTH SYSTEMS EMBRACING *CHOOSING WISELY*

Many health systems across the country have embraced *Choosing Wisely's* ideals and have used the campaign as an opportunity to improve patient care. While the overarching goal of reducing waste remains a constant across these efforts, each organization has adapted *Choosing Wisely* to address a specific problem facing its system.

Additionally, the ABIM Foundation convenes leaders from these systems several times a year to enable them to share what is working and discuss ways to overcome barriers to implementing *Choosing Wisely*.

Learn more about activities at the University of Chicago from Vineet Arora, MD, Assistant Dean of Scholarship and Discovery.



Anne Arundel Medical Center – Maryland

A team of physician leaders and marketing staff at Anne Arundel Medical Center developed messages and improvement initiatives for physicians and the public to encourage important conversations about appropriate care. To help educate clinicians, *Choosing Wisely* specialty society lists were shared with primary care physicians and links were embedded in EMRs. For patients, large screens in hospital lobbies, waiting rooms and physician offices displayed messages promoting *Choosing Wisely* and suggested questions they could ask their clinician. Anne Arundel staff also published content in its own magazine, worked with regional and national media to run articles and public service announcements, and invited members of the community to attend lectures on *Choosing Wisely* and overutilization.

The Aroostook Medical Center – Maine

Primary care providers at The Aroostook Medical Center (TAMC) in Maine chose to focus on reducing the use of antibiotics for patients with acute sinusitis as their performance improvement project for 2013, and adopted a single intervention: providing monthly reports to physicians with unblinded

prescription data for everyone in the practice. From a starting point of only 11 percent compliance with the *Choosing Wisely* recommendation against prescribing antibiotics for sinusitis, compliance rose to regularly exceed 80 percent and ultimately reached a high of 96 percent in August 2016. Project leaders said the key to change was finding advocates within TAMC's practice groups. They also said that they would base future performance improvement campaigns on *Choosing Wisely*.

Cedars-Sinai Health System – California

As of August 2017, Cedars-Sinai Health System has hardwired approximately 100 *Choosing Wisely* recommendations into its electronic medical records in both the inpatient and ambulatory settings, alerting physicians when their order conflicts with a *Choosing Wisely* guideline. Initially the alerts were “soft stops,” but some were eventually transitioned to “medium stops” that required clinicians to provide a rationale for overriding them. Pairing these real-time, clinical decision support alerts with relevant analytics, the health system hoped not only to improve quality of care and reduce unnecessary costs, but also to prepare for risk-based payments.

During the past year, potentially inappropriate ordering rates for blood transfusions for patients with high hemoglobin levels, vitamin D tests, testosterone treatments, HPV tests, and appetite stimulants for older adults all decreased by at least 20%. In order to refine the alerts and potentially elicit greater changes in physician ordering behavior, the positive predictive value (PPV) of the alerts was calculated, with a goal of achieving a $PPV \geq 60\%$. The system estimated that the annual cost savings from direct cancellation of orders alone (when the provider places the order, sees the alert, and then cancels the order) was approximately \$1.65 million during the past year (August 2016 to July 2017). Cedars-Sinai anticipates significant additional cost savings from an educational or learning effect, when providers who have previously viewed an alert then refrain from placing the potentially inappropriate order in the first place. Current efforts are underway to assure that order sets do not promote orders that potentially conflict with *Choosing Wisely* guidelines.

Christiana Care Health System – Delaware

Christiana Care Health System changed its order set so that all telemetry orders are associated with a clinical indication. Based on American Hospital Association guidelines, each indication was hardwired with a standardized time limitation resulting in orders automatically expiring at 24 or 48 hours accordingly. Bedside nurses are alerted prior to the planned expiration of telemetry orders, and then perform a bedside assessment utilizing a clinical decision support tool that prompts the nurse to contact a provider if the patient's clinical condition may warrant ongoing telemetry. Implementation resulted in [immediate and sustained decreases in telemetry orders](#) and telemetry duration of 43% and 47%, respectively.

The hospital saw 70% reduction in the mean daily number of patients monitored with telemetry. Daily cost savings in telemetry delivery were estimated to be \$13,199, with no reported increase in adverse events following the intervention.



Hear more about reducing telemetry from Jay Bhatt, Chief Medical Officer of the American Hospital Association.



Intermountain Healthcare – Utah & SE Idaho

Intermountain developed a report that gives physicians detailed information, including a graphical display, comparing their personal utilization of six *Choosing Wisely* recommendation categories to their peers at their site, their region, and the entire system. The intervention includes Best Practice Flash Cards that can be accessed online or via smartphone app, patient fact sheets, peer discussions and EMR decision support for 23 *Choosing Wisely* guidelines. The organization has seen reductions in antibiotic use for otitis media, sinusitis and strep as well as too frequent PAP testing and lab ordering at preventative visits.

University of Utah

Inspired to reduce waste by the *Choosing Wisely* campaign, The University of Utah general internal medicine hospitalist service identified laboratory testing as an area for improvement and implemented a multi-pronged initiative to reduce unneeded tests. The initiative included:

- education of all providers involved;
- standardization of the rounding process, including a checklist review, with the expectation that all plans for lab testing be discussed during rounds;
- monthly feedback at the hospitalist group meeting regarding laboratory costs, including making individual performance viewable; and,
- a financial incentive. (Fifty percent of cost savings realized by the hospital are shared with the Division of General Internal Medicine to support future quality improvement projects.)

Through this intervention, the number of tests per day significantly decreased for all tests, the lab cost per patient day was reduced from \$138 to \$123, and there was no increase in readmission rates. These reductions were not achieved in a control group that was part of the study. The authors [report](#) that the hospitalists believed “the driving factors for change were those related to process change, specifically, the use of a standardized rounding checklist to discuss lab testing and the routine review of lab costs at group meetings.”

University of Vermont Medical Center

Embracing a grassroots approach, physicians at the University of Vermont Medical Center were encouraged to propose waste reduction projects to leadership. This bottom-up approach placed the person who raised the idea for the project in the role of “clinical champion,” making them the change agent in their department and encouraging them to engage colleagues in the work. Every project had a resident or fellow assigned, with project management and data analytic support provided through the James Jeffords Institute for Quality.

Most projects relied on a combination of physician education through mailings and meetings, best practice advisories within EHRs, or redesigned paper and electronic order sets. These methods yielded successful results so far, including:

- 72 percent reduction in labs for patients with end-stage renal disease, based on the recommendation from the American Society of Nephrology.
- 90 percent reduction in DXA scans for patients younger than 65 with low risk for osteoporosis, based on the recommendation from the American College of Rheumatology.
- 71 percent decrease in portable chest X-rays in intubated patients, based on the recommendation of the Critical Care Societies Collaborative.
- 95 percent reduction in the use of CK/MB to detect or monitor cardiac ischemia, based on the recommendation of the American Society for Clinical Pathology.
- 48 percent reduction in the ordering of repetitive daily CBC and BMP on adults on the inpatient medicine service, based on the recommendations of the Society of Hospital Medicine and the Critical Care Societies Collaborative.

Ongoing efforts include projects to (1) reduce repeat positive ANA (antinuclear antibody) testing; (2) phlebotomy for inpatients receiving hemodialysis, and (3) ABG (arterial blood gas) draws for patients in the ICU on mechanical ventilation.

Medical Education

The Foundation works closely with Costs of Care, a physician-led nonprofit whose goal is to promote better care at a lower cost, to promote and recognize efforts to help residents and medical students learn how to provide appropriate care. This work has included the Creating Value Challenge, which highlights innovative ideas and projects for teaching and implementing high value care among collaborative teams of clinicians, educators, quality improvement specialists and health system administrators. Costs of Care and the ABIM Foundation have also created a Teaching Value Community that has nearly 500 members. The community features monthly webinars that discuss stewardship efforts around the nation.

Learn more about *Choosing Wisely* in medical education from Chris Moriates, MD, Assistant Dean of Healthcare Value at Dell Medical School at the University of Texas at Austin.



Working With Consumer and Patient Groups

The Alliance

The Alliance, a Wisconsin-based health cooperative of 240 self-funded employers, has used social media, blogging, infographics, employee fairs, and newsletter articles about *Choosing Wisely* as a way to increase engagement among employers and employees related to their health. They also have begun a successful initiative that incorporates *Choosing Wisely* materials into an employee booklet on how to be a better health care consumer, which it then shares with its employer members for distribution. Member employers are also finding creative ways to share *Choosing Wisely* with their own employees, including Aqua-Aerobic Systems, an Illinois-based employer that is distributing the [Consumer Reports 5 Questions wallet cards](#) to all employees, offering lunch and learns, and scanning materials to distribute via email – all with the goal of helping employees become smarter health care consumers.

Baby Boomers for Balanced Health Care

The Baby Boomers for Balanced Health Care is a Minnesota-based citizen group challenging the culture that more health care is better health care. To do this, they developed [sharable guides and resources](#) for hosting community conversations aimed at discussing the issue of overuse – and what everyday citizens can immediately do to combat it, including committing to asking the [5 Questions from Consumer Reports](#) at every medical encounter. The *Baby Boomers* also created a guide to support intra-family conversations about unnecessary tests and treatments, and in the fall the group will launch a clinician guide to help navigate various types of conversations with patients – including simple, complicated, and polarizing—around overuse and the associated risks and harms. More than 80% of participants agreed or strongly agreed the community conversations helped them question the cultural idea that more health care is better health care.

Excellus

Several health plans, including Excellus Blue Cross Blue Shield, the largest non-profit health plan in upstate New York, are using the *Choosing Wisely* campaign as an opportunity to educate clinicians and members about making wise decisions about their health. Excellus developed claims-based measurements and launched a communications campaign for its providers focused on 21 *Choosing Wisely* recommendations that includes [a microsite](#), webinars and seminars, and internal group presentations with record-breaking employee attendance numbers. Excellus has also instituted a print-on-demand system featuring more than 50 *Choosing Wisely* patient-friendly brochures to support its providers in having informed conversations with their patients.

HealthInsight Utah

Health Insight's research revealed that a tangible item would work best in delivering *Choosing Wisely* information to newly insured, low-resource, Spanish-speaking individuals in the Salt Lake City area. A former *Choosing Wisely* grantee, the organization created [refrigerator magnets](#) based on the *Choosing Wisely* Questions from Consumer Reports. The magnets also included space to write the name and phone number of a primary care provider, health insurance plan, and enrollment assister. HealthInsight Utah has distributed more than 5,000 magnets, and provides information on how to find answers to the questions through community health workers at local community organizations and weekly health fairs at the Mexican Consulate. Promotoras, certified application counselors, and health insurance navigators from partnering organizations – often native Spanish speakers – conduct follow up phone calls to provide additional support.

To reach clinicians with *Choosing Wisely* messaging and information, HealthInsight Utah created an [online toolkit](#) that includes 5 Questions, articles, videos, worksheets and other tools from Consumer Reports and specialty societies. They also offer technical support and training to help clinics implement these resources into their practice.

Lehigh Valley Business Coalition on Healthcare

The Lehigh Valley Business Coalition on Healthcare in northeastern Pennsylvania is weaving *Choosing Wisely* messaging into all communications to its 150 employer members, as well as its associate membership of hospitals, health care providers, and more. The group disseminated information on *Choosing Wisely* recommendations related to overuse of antibiotics, imaging for low-back pain, and opioids to employees, health plan members, and hospital patients via newsletters, email, a roundtable event, and [a microsite](#). Physician leadership also engaged strongly in the campaign, embedding quality measures into practices and increasing physician outreach and education through the *Choosing Wisely* evidence-based materials. Results have started appearing. According to Dr. Mark Wendling, Medical Director at Lehigh Valley Physician Hospital Organization, patients are beginning to question the necessity of specific tests and treatments, thereby developing an understanding that more is not always better.

Wikipedia

As part of the strategy for sharing accurate *Choosing Wisely* information to health care consumers, Consumer Reports hired a Wikipedian in Residence to guide, edit, and develop more than 200 articles based on 100 recommendations from 30 medical specialty societies. In the five years since *Choosing Wisely's* launch, health care consumers have viewed more than 175 million relevant, cited and reviewed Wikipedia pages on *Choosing Wisely* topics such as antibiotics, low back pain and CT scans.

STATEWIDE EFFORTS TO ADVANCE *CHOOSING WISELY*

Several statewide initiatives are currently underway exploring models of how the campaign could be adopted at the state level.

Washington

In 2013, the Washington Health Alliance partnered with the Washington State Hospital Association and the Washington State Medical Association to form a task force committed to ensuring safe, high-quality health care for patients in Washington State through reducing health care overuse and waste. The task force has created a number of resources, including [Less Harm, Less Waste: Choosing Wisely in Washington State](#) and the [Choosing Wisely Action Manual](#). It also leads a “Change Three Things” initiative focusing health systems on reducing overuse of antibiotics for acute bronchitis, imaging for uncomplicated headaches, and Pap tests for women between the ages of 30 and 65.

Rhode Island

The Rhode Island Business Group on Health convenes physicians, consumers and employers across the state in a shared effort to promote conversations aimed at reducing waste and overuse. *Choosing Wisely* patient-friendly information is disseminated to government employees, businesses, colleges and universities, health systems, medical groups and more. Rhode Island Medical Society serves as one of the lead partners, and the campaign has been embraced by practices including Coastal Medical, one of the largest primary care groups in the state. The campaign was also recognized by a special proclamation from the governor and a grant from the Rhode Island Foundation.

Connecticut

The Connecticut *Choosing Wisely* Collaborative is a diverse multi-stakeholder group that is committed to the widespread adoption of *Choosing Wisely* in Connecticut. The Collaborative partners with and provides a range of outreach and education activities to physicians, health systems, patients and community organizations, educational institutions and employers. Through a grant from the Connecticut Health Foundation, the Collaborative, in partnership with other local organizations, conducted a series of focus groups and a pilot study in two Federally Qualified Health Centers to introduce the “5 Questions” at the point of care and get feedback from patients and clinicians. The study revealed that patients found the questions useful, and felt the wallet cards in particular empowered them to ask questions of their clinicians, while clinicians reported that having the “5 Questions” materials offered greater opportunities to engage their patient in shared-decision making. The study also suggested that *Choosing Wisely* can be a tool for promoting health equity if attention is paid to the health care experiences and specific contextual factors that impact patients’ comfort and willingness to engage in care conversations.

C. Todd Staub, MD, shares more about the *Choosing Wisely* initiative in Connecticut and the importance of collaboration among stakeholders.



INSPIRING RESEARCH

When the *Choosing Wisely* campaign was launched in 2012, very little research focused on drivers of overuse, its effects, or possible solutions, despite recognition that up to 30% of all health care spending was wasteful. Thanks to efforts like *Choosing Wisely*, the number of [articles on overuse nearly doubled](#) from 2014 to 2015. More than 5,500 journal articles have been published that refer to *Choosing Wisely* and society recommendations since 2012.

Additionally, several journals have since created special sections dedicated to addressing waste and overuse, including the Journal of Hospital Medicine’s “Things We Do For No Reason” and JAMA Internal Medicine’s “Less is More.”

To advance research in this area, the ABIM Foundation and AcademyHealth have partnered to create the Research Community on Low-Value Care, which has brought together more than 100 researchers with an interest in overuse. The community connects researchers with one another, facilitating the exchange of information and helping generate collaborations.

SUPPORTING CLINICIANS IN *CHOOSING WISELY*

Seventy percent of physicians say that after they speak with a patient about why a test or procedure is unnecessary, the patient often avoids it. To enhance physician communication skills supporting these conversations, the *Choosing Wisely* campaign and others have created tools and resources to help them provide the best care possible for their patients.

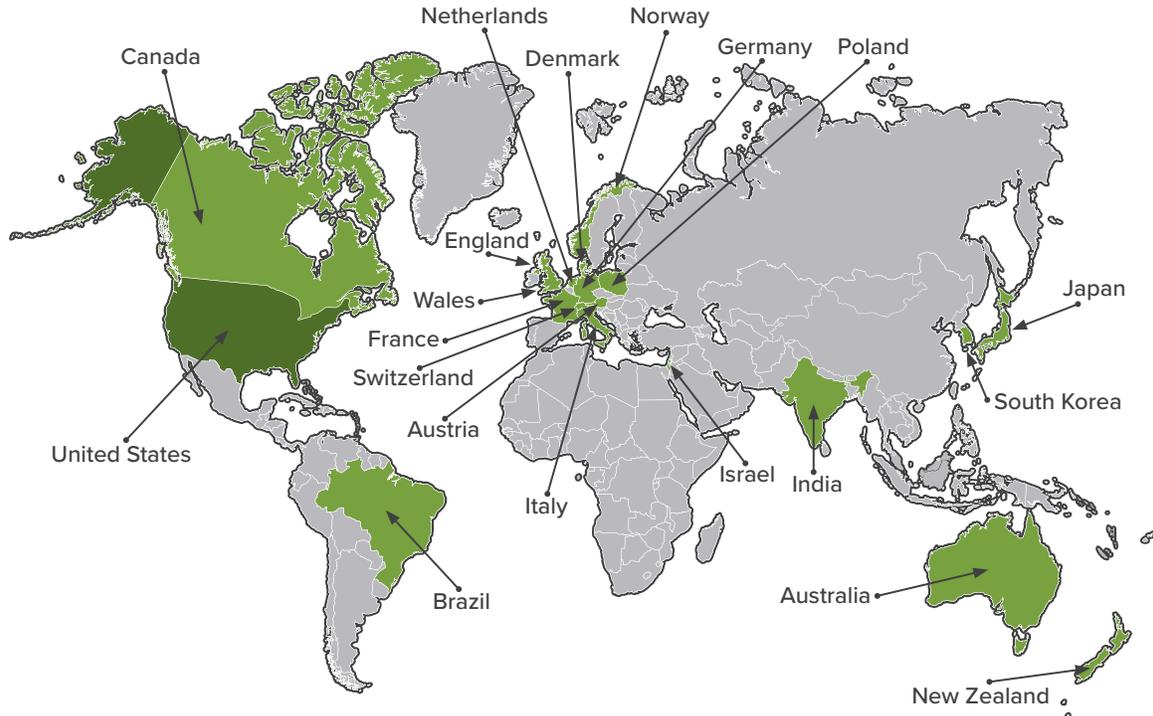
- Developed by the **Drexel University College of Medicine** and nine medical specialty societies, [this suite of communications modules](#) helps physicians engage their patients in conversations about tests and treatments to question. The scenario-based modules have been viewed more than 20,000 times and include situations physicians commonly encounter, using the *Choosing Wisely* lists of tests and treatments to question as a starting point. Modules address areas such as patient requests for an MRI for back pain, antibiotics for sinusitis, CT scans for head trauma in children and pre-operative stress tests, and provide specific recommendations on how physicians can engage their patients in conversations about the risks and benefits of these tests or treatments.
- With both national and global efforts underway to reduce inappropriate antibiotic prescribing, physician and patient conversations play a critical role in ensuring that antibiotics are properly used. Funded by RWJF, [Conversations on Health](#) is designed to improve physician-patient communication to address the overuse of antibiotics. The site allows users to engage in practice conversations with a virtual patient or physician to improve communication skills that can be used in real-life conversations. At the conclusion of the interaction, users receive performance feedback and coaching in areas needing improvement, such as articulating concerns or confirming understanding.
- A module from the [AMA's STEPS Forward™](#) collection of practice improvement strategies offers steps that can help physicians implement *Choosing Wisely* in their practice. For example, the module suggests physicians can begin having discussions about *Choosing Wisely* with their colleagues by asking which guidelines they are currently following and exploring concerns about overuse or inappropriate care. They can then identify opportunities to eliminate sources of waste or possible harm and work together to develop solutions to perceived barriers. Physicians can also claim AMA PRA Category 1 Credit for completing the free module.



A GROWING GLOBAL MOVEMENT

The simple premise of the *Choosing Wisely* campaign – facilitating conversations between clinicians and patients about appropriate care and overuse – has now spread globally and inspired 19 countries to develop initiatives of their own based on these ideals.

Choosing Wisely's influence can now be found in:



While some of these programs are just getting underway, others have already begun to make an impact. Similar to the response to the campaign here in the United States, these international efforts have also been embraced by clinicians and the public.



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