

## CHOOSING WISELY®: NEXT STEPS IN IMPROVING HEALTHCARE VALUE

## Who Is Going to Make the Wise Choice?

David Leverenz, MD<sup>1\*</sup>, Wade Iams, MD<sup>1</sup>, Josh Heck, MD<sup>2</sup>, Donald Brady, MD<sup>3</sup>

<sup>1</sup>Department of Internal Medicine, Vanderbilt University Medical Center, Nashville, Tennessee; <sup>2</sup>Department of Radiology, Vanderbilt University Medical Center, Nashville, Tennessee; <sup>3</sup>Office of Graduate Medical Education, Vanderbilt University Medical Center, Nashville, Tennessee.

Inspired by the American Board of Internal Medicine's Choosing Wisely® campaign, a group of housestaff at Vanderbilt University Medical Center created the Vanderbilt Choosing Wisely Steering Committee (VCWSC) to explore ways to apply the campaign's principles of high value care to daily practice. In this article, we propose that housestaff

leadership is key in the implementation of high value care initiatives at academic health centers (AHCs). We then describe the formation and activities of the VCWSC in the hope that our success will inspire residents at other AHCs to create similar initiatives. *Journal of Hospital Medicine* 2015;10:544–546. © 2015 Society of Hospital Medicine

“Failure of academic medicine to improve value will undermine professionalism and threaten autonomy because outside forces, such as insurers and regulators, will surely impose change if academic leaders and physicians fail.”<sup>1</sup>

The verdict is in—doctors order too many tests. This problem is most prominent in academic health centers (AHCs), where the use of testing resources is higher than in community hospitals.<sup>2</sup> Most prior attempts to improve the value of care at AHCs have been driven by faculty and hospital administration in a top-down fashion with only transient success.<sup>3</sup> We believe that successful and sustainable change should start with the housestaff, who are training in a system afflicted by wasteful overuse of healthcare resources. Therefore, we created a housestaff-led initiative called the Vanderbilt Choosing Wisely Steering Committee to change the culture of academic medicine. If AHCs are going to start choosing wisely, housestaff must be part of the engine behind the change.

### FORMING THE VANDERBILT CHOOSING WISELY STEERING COMMITTEE

The idea for the Vanderbilt Choosing Wisely Steering Committee (VCWSC) was born in December 2013 during a monthly Graduate Medical Education Committee meeting involving housestaff and faculty representatives from multiple subspecialties. At that time, the national Choosing Wisely campaign was in full stride, with more than 50 organizations having proposed top 5 lists of tests and procedures that should

be questioned.<sup>4</sup> Several participants at the meeting decided to create a steering committee to integrate these proposals into daily practice at Vanderbilt University Medical Center.

Housestaff have formed the core of the VCWSC from the beginning. The initial members were residents on the Graduate Medical Education Committee, including a fifth-year radiology resident and a second-year internal medicine resident who served as the first co-chairs. More housestaff were recruited by email and word-of-mouth. Currently, the committee is composed of residents from the departments of internal medicine, radiology, pediatrics, neurology, anesthesiology, pathology, and general surgery. These residents perform all of the committee's vital functions, including organizing biweekly meetings, brainstorming and carrying out high-value care initiatives, and recruiting new members. Of course, this committee would not have the authority to create real change without the guidance of numerous faculty supporters, including the designated institutional official and the associate vice chancellor for health affairs. However, we firmly believe that the primary reason this committee has been successful is that it is led by housestaff.

### THE IMPORTANCE OF HOUSESTAFF LEADERSHIP

Residents are at the front line of care delivery at academic health centers (AHCs). Innumerable tests and procedures at these institutions are ordered and performed by housestaff. Therefore, culture change in academic medicine will not occur without housestaff culture change. Unfortunately, residents have been shown to have a lower level of competency with regard to high-value care than more experienced providers.<sup>5</sup> The housestaff-led VCWSC is uniquely positioned to address this problem by using personal experience and peer-to-peer communication to address the fears, biases, and knowledge gaps that cause trainees to waste healthcare resources. Resident members of the VCWSC wrestle daily with the temptation to overtest to avoid missing something or make a rare

\*Address for correspondence and reprint requests: David Leverenz, MD, Department of Internal Medicine, Vanderbilt University Medical Center, 1215 21st Avenue South, Medical Center East, 7th Floor, North Tower, Nashville, TN 37232-8300; Telephone: 615-936-3216; Fax: 615-936-3156; E-mail: david.l.leverenz@vanderbilt.edu

Additional Supporting Information may be found in the online version of this article.

Received: February 17, 2015; Revised: April 17, 2015; Accepted: April 20, 2015

2015 Society of Hospital Medicine DOI 10.1002/jhm.2377

Published online in Wiley Online Library (Wileyonlinelibrary.com).

diagnosis. They are familiar with the systems that encourage overutilization, like shortcuts in ordering software that allow automatically recurring orders. Perhaps most importantly, they are able to discuss high-value care with other trainees as equals, instead of trying to enforce compliance with a set of restrictions put in place by supervisors.

## A SYSTEMATIC STRATEGY FOR EFFECTING CHANGE

To successfully implement high-value care initiatives, the VCWSC follows a strategy proposed by John Kotter for effecting change in large organizations.<sup>6</sup> According to Kotter, it is critical to create a vision for change, communicate the vision effectively, and empower others to act on the vision. The VCWSC's vision for change is to encourage optimal medical practice by implementing Choosing Wisely top 5 recommendations. To communicate this vision, the VCWSC follows the rhetorical style of the national Choosing Wisely campaign. The American Board of Internal Medicine Foundation researched this rhetoric extensively in the years leading up to the development of the top 5 lists. They found that simply asking providers to judiciously distribute healthcare resources often created a feeling of patient abandonment. Instead, providers are much more likely to respond to messages that encourage "wise choices" that enhance professional fulfillment, patient well-being, and the overall quality of care.<sup>4</sup> Therefore, the VCWSC emphasizes these same values in its e-mails, fliers, and presentations. Importantly, the VCWSC does not directly limit providers' abilities to order tests or perform procedures. Instead, the VCWSC uses education and data to empower others to act on the Choosing Wisely vision for high-value care.

After communicating the vision for change, Kotter recommends sustaining the vision by creating short-term "wins."<sup>6</sup> To demonstrate these wins, the VCWSC collects data on the effects of its initiatives and celebrates the success of individuals and teams through regular widely distributed emails. Initially this involved manually counting the number of tests ordered by many providers. Fortunately, experts from the Department of Bioinformatics partnered with the VCWSC to create an automated data collection system that is much more efficient, enabling the committee to quickly collect and analyze data on tests and procedures at Vanderbilt University Medical Center. These data are fed back to participants in various initiatives, and they are used to demonstrate the efficacy of these initiatives to others throughout the medical center, thus garnering trust and encouraging others to participate in VCWSC projects. With enough short-term wins, the VCWSC hopes to achieve Kotter's ultimate goal, which is to consolidate and institutionalize changes to have a lasting impact.<sup>6</sup>

## REDUCING DAILY LABS—AN EARLY SUCCESS OF THE VCWSC

One example of the committee's early success is the reduction of routine complete blood counts (CBCs) and basic metabolic panels (BMPs) on internal medicine services, as recommended in the Choosing Wisely top 5 list proposed by the Society of Hospital Medicine. Prior studies on reducing routine labs required interventions like displaying charges at the time of test ordering,<sup>7,8</sup> using financial incentives,<sup>2,9</sup> and eliminating the ability to order recurring daily labs.<sup>10</sup> Instead of replicating these efforts, the VCWSC decided to use an educational campaign and real-time data feedback to focus on the root of the problem—a culture of overtesting. After obtaining the support of the internal medicine residency program leadership, the VCWSC distributed an evidence-based flier (see Supporting Information in the online version of this article) summarizing the harms of and misconceptions surrounding excessive lab testing. These data were also presented at housestaff conferences.

Following this initial educational intervention, the VCWSC began tracking the labs ordered for patients on housestaff internal medicine teams to see what proportion have a BMP or CBC drawn each day of their hospitalization. Each week, the teams are sent an email with their lab rate compared to the lab rates of analogous teams. At the end of each month, all internal medicine housestaff and faculty are notified which teams had the lowest lab rate for the month. The VCWSC does not attempt to define an "unnecessary lab" or offer incentives; the teams are simply reminded that ordering fewer labs can be good for patient care. Since the initiative began, the teams have succeeded in reducing the percentage of patients receiving a CBC and BMP each day from an average of 90% to below 70%.

## FUTURE DIRECTIONS

Moving forward, the VCWSC hopes to further engrain the culture of Choosing Wisely into daily practice at Vanderbilt University Medical Center. The labs initiative has expanded to many services including surgery, neurology, and the medical intensive care unit. Other initiatives are focusing on excessive telemetry monitoring and daily chest radiographs in intensive care units. In addition, the VCWSC is collaborating with other AHCs to help them implement their own Choosing Wisely projects.

## A CALL FOR MORE HOUSESTAFF CHOOSING WISELY INITIATIVES

Housestaff are perfectly positioned to lead a change in the culture of academic medicine toward high-value care. The VCWSC has already seen promising results, and we hope that similar initiatives will be created at AHCs across the country. By following John Kotter's recommendations for implementing change and using

the Choosing Wisely top 5 lists as a guide, housestaff-run committees like the VCWSC have the potential to change the culture of medicine at every AHC. If we do not want outside regulators to decide the future of academic medicine, we must find a way to cut down on wasteful spending and unnecessary testing. Residents everywhere, let us choose wisely together.

### Acknowledgements

The authors of this study acknowledge the faculty, residents, and medical students who have supported the efforts of the Vanderbilt University Choosing Wisely Steering Committee.

**Disclosures:** Dr. Brady serves on the board of the ACGME but receives no financial payment other than compensation for travel expenses to board meetings. He also was Chair of the Board for the American Academy on Communication in Healthcare in 2014.

### References

1. Korensetin D, Kale M, Levinson W. Teaching value in academic environments. Shifting the ivory tower. *JAMA*. 2013;310(16):1671–1672.
2. Martin AR, Wolf MA, Thibodeau LA, Dzau V, Braunwald E. A trial of two strategies to modify the test-ordering behavior of medical residents. *N Engl J Med*. 1980;303(23):1330–1336.
3. Solomon DH, Hashimoto H, Daltroy L, Liang MH. Techniques to improve physicians' use of diagnostic tests: a new conceptual framework. *JAMA*. 1998;280(23):2020–2027.
4. Wolfson D, Santa J, Slass L. Engaging physicians and consumers in conversations about treatment overuse and waste: a short history of the Choosing Wisely campaign. *Acad Med*. 2014;89(7):990–995.
5. Hines JZ, Sewell JL, Sehgal NL, Moriates C, Horton CK, Chen AM. "Choosing Wisely" in an academic department of medicine [published online June 26, 2014]. *Am J Med Qual*. doi:10.1177/1062860614540982.
6. Kotter JP. Leading change; why transformation efforts fail. *Harv Bus Rev*. 1995;March-April:57–67.
7. Feldman LS, Shihab HM, Thiemann D, et al. Impact of providing fee data on laboratory test ordering: a controlled clinical trial. *JAMA Intern Med*. 2013;173(10):903–908.
8. Tierney WM, Miller ME, McDonald CJ. The effect on test ordering of informing physicians of the charges for outpatient diagnostic tests. *N Engl J Med*. 1990;322(21):1499–1504.
9. Han SJ, Saigal R, Rolston JD, et al. Targeted reduction in neurosurgical laboratory utilization: resident-led effort at a single academic institution. *J Neurosurg*. 2014;120(1):173–177.
10. Neilson EG, Johnson KB, Rosenbloom ST, et al. The impact of peer management on test-ordering behavior. *Ann Intern Med*. 2004;141(3):196–204.