

The American Journal of CCOU111table

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Working together to reduce low-value care, stakeholders can help eliminate wasteful spending and deliver on their goal to improve the health of Americans by delivering higher-quality care at lower cost.

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AS THE NEW EDITOR-IN-CHIEF of *The American Journal of Accountable Care** (*AJAC*), I'm particularly excited about the June 2019 issue because the content is an excellent representation of how we see *AJAC*'s niche going forward. Specifically, the goal is to straddle the space where implementation science, health services research, and applied management and systems science meet. This is a lot of space to cover, but it is incredibly important if healthcare in the United States is to achieve greater value for resources expended.

While partnerships between scientists and practitioners have led to improvements in care delivery, the business of evidence creation has been dominated by academics and health scientists, often with little input from consumer advocates, industry representatives, and care providers. Likewise, innovations occurring in industry are often considered proprietary in a health system with significant profit motives. The result is that lessons on implementing scientific evidence are not disseminated enough, nor are innovative ideas studied with the level of rigor needed to influence policy, payment, and clinical training.

The vision is for AJAC to provide a space for scientists and those involved in all facets of care delivery to interact and to communicate with those who set policy, regulations, and payment. AJAC will adhere to the principles of transparency and scientific rigor, but it will also embrace the uncertainty that comes with applying science in real-world settings, publishing results from exploratory or pilot studies and informed commentaries from leaders in the field.

The June issue illustrates the value of *AJAC*:

- Low-value care is discussed from the perspectives of a patient advocate, a
 health plan, and a state policy maker. They highlight the success possible
 when such care is targeted and eliminated, as well as the delicate balance
 of communicating to patients the costs and benefits of treatment options.
- Yunfeng Shi, PhD, and coauthors reflect on the success and limitations of the push to implement and use the capabilities of electronic health records and health information technology. Despite progress, there is more work to be done to achieve better care. The article highlights some of the political, economic, and market barriers that impede achieving that potential.
- Two articles report on important topics from the field, including an article
 by Megan N. Whittet, MPH, and coauthors that focuses on health systems
 changes to address tobacco dependence; and an article by Bernadette
 Mazurek Melnyk, PhD, APRN-CNP, that focuses on clinician burnout.

I hope you find the content in the June issue of *AJAC* useful in your work, and I encourage you to think about contributing your own content for future issues. We are quite willing to work with potential authors, many of whom may not have experience with publication, to help frame and develop their work to meet the publication and scientific standards of *AJAC*.

Dennis P. Scanlon, PhD Editor-in-Chief

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Accountable Care

The American Journal of Accountable Care® (AJAC) is seeking to publish **Original Research**, **Reform Trends**, and **Insights** articles on payment reform, alternative delivery models, quality improvement, and other accountable care topics.

AJAC is a quarterly publication that provides a platform for sharing and discussing research and best practices in the realm of accountable care to ensure the improvement of care quality. Whereas Original Research forms the cornerstone of *AJAC*, its Reform Trends and Insights sections help disseminate data and opinions about accountable care and healthcare reform.

Original Research articles seek to answer a specific research question and present study findings that are often generalizable and actionable. For instance, these articles can examine accountable care spending patterns or assess the transition to value-based reimbursement. Original Research articles should be shorter than 3000 words and contain no more than 5 graphic elements and no more than 50 references.

Reform Trends articles provide descriptive data or case analyses of current trends in healthcare. For example, these articles can describe results of innovative programs implemented in clinical settings; highlight effective models of care; or describe partnerships among academic, community, and clinical stakeholders. Reform Trends articles should be shorter than 2000 words and contain no more than 2 graphic elements and no more than 30 references.

Insights articles are opinion pieces that share thought-provoking perspectives on timely topics in healthcare, including viewpoints that are controversial. For instance, these articles can react to newly announced policy changes, predict a coming trend in accountable care, or share frameworks for improving population health. Insights articles should be shorter than 1500 words and contain no more than 2 graphic elements and no more than 30 references.

All manuscripts should be submitted via email to info@ajmc.com.

Additional information about submission can be found at www.ajmc.com/about/ajac/info-authors/author-links.







The Role of Health Systems in Reducing Tobacco Dependence

MEGAN N.WHITTET, MPH;TRACI R. CAPESIUS, MPH; HEATHER G. ZOOK, MA;
AND PAULA A. KELLER, MPH

ABSTRACT

OBJECTIVES: Health systems play an important role in addressing tobacco use. Research indicates that implementing systems changes in clinical settings may lead to greater rates of tobacco treatment delivery and reductions in tobacco use prevalence compared with clinics and health systems that do not implement such changes. Few studies have described facilitators and barriers to implementing these changes.

STUDY DESIGN: A process evaluation was conducted of 5 Minnesota health systems that implemented multiple systems changes to make tobacco treatment delivery a standard of care. Three large integrated health systems (I in the Twin Cities metropolitan area, I in northern Minnesota, and I in central Minnesota), a federally recognized Minnesota Chippewa Tribe, and a safety net dental practice were evaluated.

METHODS: An external evaluator conducted 3 waves of key informant interviews with each system. Purposive sampling was used to select key informants from each health system. A total of 49 interviews among 30 staff were conducted. Project documents were also reviewed. Evaluators used both deductive and inductive approaches to identify cross-cutting themes.

RESULTS: Several facilitators were identified, including using a team-based approach to engage staff, implementing new protocols and training staff, and utilizing tools such as electronic health records and data to conduct quality improvement initiatives. Barriers included delays in electronic health record changes and keeping tobacco treatment prioritized in the organization.

CONCLUSIONS: Health systems change can provide a renewed sense of enthusiasm and ownership of tobacco treatment among providers and staff and can be an effective way to help prioritize addressing tobacco use.

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obacco use screening and brief intervention is 1 of the top 3 preventive services in terms of cost savings and potential population health improvement. Health systems play an important role in addressing tobacco use. Seventy-five percent of current smokers report visiting a healthcare provider in the past year. The majority of smokers want their healthcare provider to address their smoking, 4.5 and satisfaction with care is highest among smokers who receive cessation assistance or follow-up. 4.6

The US Public Health Service (PHS) Clinical Practice Guideline, *Treating Tobacco Use and Dependence*, recommends implementing the 5 As (Ask, Advise, Assess, Assist, and Arrange) to systematically address tobacco use. ^{7,8} Implementing the 5 As, including brief interventions by providers, is associated with greater tobacco cessation efforts among patients compared with no intervention⁹; research also demonstrates that brief advice from a physician increases successful quitting. ¹⁰ Nationally, healthcare providers consistently *assess* for tobacco use (90%) and frequently *advise* patients to quit (71%), but far fewer *assist* patients to quit (49%). ⁴ A similar gap is seen in Minnesota. ¹¹

The PHS Clinical Practice Guideline and the CDC also recommend that clinics and health systems implement health systems changes to improve tobacco treatment delivery (eg, establishing a process to identify tobacco users, educating staff on tobacco treatment, providing resources and feedback to promote interventions).^{7,12} Evidence suggests that health systems change can improve care delivery processes compared with clinical settings where such changes were not implemented.^{7,13} Although the evidence is mixed regarding whether systems change improves

Table 1. Health System Characteristics

Type of Health System	Number of Minnesota Counties Served ^a	Number of Providers	Number of Patients Served Annually
Safety net dental system with urban and rural locations	>30	100-250	20,000-40,000
Large, integrated, rural health system in northern Minnesota	20-30	>1000	>900,000
Large, integrated health system in central Minnesota	10-20	>1000	300,000-500,000
Large, integrated, urban health system in the Twin Cities metropolitan area	1-10	250-500	>900,000
A constituent of the federally recognized Minnesota Chippewa Tribe	1-10	<100	<10,000

^aThis range reflects the number of counties served by the health system throughout Minnesota.

cessation outcomes,¹³ some studies have shown that systems change in clinic settings can reduce the prevalence of tobacco use.^{8,9} However, few studies have examined factors that influence systems change implementation.¹⁴

ClearWay Minnesota, an independent nonprofit organization, released a competitive request for proposals to fund Minnesota healthcare systems for the implementation of health systems changes to more successfully address tobacco use. Applicants applied for up to \$200,000 to fund a 2-year project; they were instructed to propose evidence-based strategies that aligned with their organization's goals to better assess and address tobacco use. ClearWay Minnesota identified 3 areas of interest for applicants to consider: incorporating best practices for systems change, such as those outlined in the Clinical Practice Guideline⁷; optimizing their electronic health record (EHR); and using quality improvement processes. An expert review panel evaluated proposals and made funding recommendations. Funding decisions were made by ClearWay Minnesota's Board of Directors. Three integrated health systems (1 in the Twin Cities metropolitan area, 1 in northern Minnesota, and 1 in central Minnesota), a federally recognized Minnesota Chippewa Tribe, and a safety net dental practice were funded (see Table 1 for health system characteristics).

We conducted a process evaluation to better understand facilitators and barriers to systems change implementation experienced by these diverse health systems. The insights reported in this paper can inform other systems change efforts.

METHODS

Study Design

Professional Data Analysts, an independent external evaluation firm, conducted the process evaluation. A qualitative approach, informed by Yin's case study methodology¹⁵ and Patton's qualitative design principles,¹⁶ was used to capture the complexity of the systems change process, as well as to gain insight on the facilitators, barriers, lessons learned, and potential sustainability of these changes. Intervention approaches differed across sites; examples included training staff and providers on delivering the 5 As, optimizing EHRs for clinical decision support and documentation, and creating standard

workflows and procedures for identifying and treating tobacco users. All 5 health systems conducted their systems change activities over a 2-year period; 3 sites conducted activities from 2014 to 2016 and 2 sites from 2015 to 2017. A contracted technical assistance provider supported grantees on an as-needed basis.

Document review. ClearWay Minnesota provided the evaluators with key documents for each health system (eg, grant application, progress reports, meeting notes). Throughout the grant period and before each round of interviews, 2 evaluators independently reviewed all documents to inform interview protocol development.

Key informant interviews. The evaluators conducted 3 waves of semistructured interviews with key informants at each health system at the beginning, midpoint, and end of each 2-year grant period. Interview protocols were based on document review, previous systems

Table 2. Example Interview Questions

Category	Questions
Facilitators of change	Whose support or buy-in has been critical to implementing the new workflow and electronic health record elements? What were some key facilitators of the Certified Tobacco Treatment Specialist expansion across the system?
Barriers to change	 What challenges, if any, have staff encountered using the different electronic health record referral options? What challenges have been encountered in organizing and conducting trainings?
Lessons learned	What have you learned from the quality improvement process? Are there lessons learned that you would share with other health systems looking to implement tobacco-related systems changes?
Sustainability	 Thinking about this work a year from now, which aspects do you feel might continue and which might not? How do you plan to keep tobacco cessation a priority throughout the health system?

change studies, ^{4,8,9,14} tobacco control best-practice guidelines, ¹² and input from ClearWay Minnesota staff. Although each health system's interview protocol was tailored to its project, all interviews were used to gather information about facilitators, barriers, lessons learned, and potential sustainability. **Table 2** lists example interview questions.

Participants

Interviewees were selected through purposive sampling. 16 ClearWay Minnesota staff and health system staff identified key informants within each system who were knowledgeable about the project, and evaluators invited them to participate by email. No participants declined an interview. **Table 3** describes key informant characteristics.

Evaluators interviewed a minimum of 2 key informants from each health system during each interview wave. Interviews lasted 30 to 90 minutes; almost all were conducted face to face by 2 evaluators (1 primary, 1 secondary), but 2 interviews were conducted by phone. The primary evaluator was involved in all interviews; 1 of 2 other evaluators served as a secondary interviewer. A total of 49 interviews were conducted with 30 individuals across waves and across the 5 health systems (Table 3). All interviewees consented to have their interviews recorded. The evaluators created a detailed summary of each interview and sent it to the interviewees to review for completeness and accuracy. Subsequent corrections or additions from interviewees were incorporated into final summaries.

Data Analysis

After each interview wave, evaluators conducted content analysis of each interview summary, organizing the data into 4 a priori categories based on key lines of interview questioning: facilitators, barriers, lessons learned, and potential sustainability. After the last interview wave, evaluators used the organized summaries from all 5 sites to

conduct a cross-site analysis to identify common themes within each of the 4 categories. Evaluators used both deductive and inductive approaches to identify themes across sites. ^{16,17} The health systems change literature ^{4,8,9,14} provided initial guidance for themes that might be identified during analysis. The primary evaluator identified common themes from the data, comparing data across the 5 health systems. These themes were then reviewed by the second evaluator. The 2 evaluators discussed any new themes or differences in interpretation until they reached consensus. Quotations or excerpts from interview notes and recordings were deidentified to protect the confidentiality of the individual and the health system.

The Minnesota Department of Health Institutional Review Board determined this study to be exempt from further review.

RESULTS

Facilitators, barriers, and lessons learned, as well as opportunities and challenges to sustaining systems change, are reported here.

Facilitators

Six facilitators of change were identified. Because each health system is unique, strategies varied based on the health system's goals. Additional strategies are listed in **Table 4**.

Each grantee recognized the importance of building system-level support to elevate tobacco use as a priority and to leverage internal resources. Engaging organizational leaders by including them on project teams, as well as identifying clinic champions, helped to send a powerful signal across the organization of the importance of this work and to increase staff buy-in and enthusiasm for systems change.

"Having that buy-in from a leadership level all the way up to the CEO [chief executive officer] of the organization to say, 'This is a priority, and we're investing in it.'" – Project manager

Table 3. Key Informant Characteristics

Type of Health System	Number of Unique Interviewees	Number of Interviews Across 3 Waves	Interviewee Roles
Safety net dental system with urban and rural locations	7	10	Health system leadership, project staff, information technology staff, clinic champions
Large, integrated, rural health system in northern Minnesota	4	9	Project staff, quality improvement staff, primary care staff
Large, integrated health system in central Minnesota	7	11	Physician champion, quality improvement staff, care coordinators, tobacco treatment staff, project staff
Large, integrated, urban health system in the Twin Cities metropolitan area	5	8	Project staff, physician champion, quality improvement staff, information technology staff
A constituent of the federally recognized Minnesota Chippewa Tribe	7	11	Project staff, clinic staff, clinic champion, health and human services staff and leadership
Total	30	49	

Table 4. Example Strategies to Facilitate Change

Facilitator of Change	Example Strategies
Building system-level support	 Worked with the ambulatory care quality committee to approve a minimum standard of asking every patient about their tobacco use at least annually across all ambulatory care clinics Pilot tested new workflows to demonstrate success to and receive buy-in from system leadership to continue implementation
Taking a team approach	 Brought together staff with varying roles and from multiple departments to form cross-disciplinary teams, such as a Data and Evaluation Workgroup to develop documentation and tools and ensure that key data from the EHR could be extracted Conducted needs assessments with clinic staff to identify gaps and the tools/resources needed in assessing and addressing tobacco use with patients
Capitalizing on internal and external priorities	 Integrated tobacco into new rooming workflows for medical assistants that were already being piloted within primary care clinics Identified cessation intervention opportunities by tracking the number of patients with diabetes and/or vascular issues not meeting quality measures due to their tobacco use
Implementing new protocols and training staff	 Redefined primary care nurse roles to expand internal cessation counseling capacity Modified existing patient encounter flowcharts to incorporate new standard operating procedures, such as the 5 As
Modifying the EHR	 Modified the EHR to incorporate documentation tools, such as patient tobacco use status, readiness to quit, and progress notes Implemented new internal and external referral options in the EHR, such as cessation medication, cessation counseling, smoking cessation clinic, or pharmacy
Monitoring data and providing feedback	 Worked with information technology and quality departments to extract key tobacco-related data, such as tobacco use prevalence and number of referrals to cessation medications and counseling, to monitor performance Tracked provider utilization of new workflows and shared with staff to identify both the successes and areas for improvement

EHR indicates electronic health record.

A second facilitator was taking a team approach to implementing systems change. Although each project team was structured differently, all grantees engaged multiple levels of staff and providers to foster buy-in, as well as to design and implement new workflows and standard operating procedures. Some grantees also used surveys and meetings to obtain feedback from leadership and clinic staff to inform the design and implementation of changes. It was motivating for staff and providers to know that their input was valued. This also helped to ensure that workflows and standard operating procedures were aligned with clinic practices.

"The [grant] Steering Committee is a really robust group of providers, nurse managers, data team members, community health staff, TTS [Tobacco Treatment Specialist] counselors, and primary care leadership." – Project manager

"This team was instrumental in communication between the cessation program and clinic providers. Our clinic champion was key." – Tobacco team member

A third facilitator was capitalizing on internal and external priorities. Some grantees leveraged concurrent internal systemwide

process change efforts and incorporated tobacco interventions into primary care workflows. One grantee worked with its Screening, Brief Intervention, and Referral to Treatment (SBIRT)¹⁸ trainer to incorporate tobacco dependence treatment education into existing SBIRT training.

A key external factor driving change was EHR Meaningful Use requirements. In 2011, CMS established the Meaningful Use incentive payment program to encourage eligible providers and hospitals to meet specific EHR criteria and reporting requirements. Multiple grantees used Meaningful Use measures (eg, clinical quality measures for diabetes and vascular care) to justify the need for tobacco-related systems change. Project staff presented to leadership and clinic staff, highlighting how tobacco dependence treatment was tied to multiple chronic disease outcomes; inpatient readmission rates; and other clinic, departmental, and systemwide goals. This information helped demonstrate how addressing tobacco use could improve performance on critical system priorities.

"Get on your health system's agenda to look at population health and total cost of care. Tobacco treatment affects many other areas, and it can be prioritized once you see how it impacts overall health and healthcare savings." – Executive champion

Moreover, 1 grantee successfully made the case that tobacco use was highly related to system-level priorities, resulting in other departments and the health system's charitable foundation providing additional financial support.

"I think the project manager's ability to bring a group of resources together has been the greatest accomplishment, and [getting] the resources we need." – Primary care director

Implementing new protocols and training staff also facilitated change. Grantees embedded tobacco treatment into routine care by either modifying existing workflows or creating new standard operating procedures. Staff roles for implementing these processes were also defined.

Training and retraining staff on new protocols was crucial to improve performance. In addition, 2 grantees provided existing staff with Tobacco Treatment Specialist (TTS) training. This specialized training builds knowledge and skills to treat tobacco dependence and to integrate evidence-based treatments into health systems. ²⁰ The TTSs became additional systems change champions, served as resources for providers and staff, and increased treatment delivery capacity.

"We developed a comprehensive half-day initial training session that was effective, and succeeded in motivating our clinical staff members to embrace our tobacco control protocol." — Clinic staff

"The training of TTSs at the provider level has been integral for improving utilization rates and the delivery of evidence-based treatment. Training sparks a personal commitment to drive change within the clinical setting." – Clinic staff

All grantees modified the EHR to facilitate systems change efforts. For example, some grantees included tobacco-specific templates within their EHR to allow providers and staff to more easily document patient tobacco use and refer patients to cessation resources.

"The EHR customized modifications were appropriate for supporting our standard operating procedures." – Clinic staff

A final facilitator of change was monitoring data and providing feedback to staff to improve compliance with new protocols. Data helped identify additional training needs to improve processes. Multiple grantees created reports using tobacco-related EHR data. Sharing these reports with staff and leadership helped to generate interest in and support for systems change processes beyond a single department or clinic.

"Dissemination of the clinic experience has garnered the attention and support of clinic quality leadership and regional/departmental sites for replication, enhancement, and the renewed spirit that process change can and will produce positive outcomes." – Clinic staff

Barriers and Lessons Learned

One barrier was implementing tobacco-specific EHR changes. Many grantees had difficulty implementing these changes due to competing demands for information technology (IT) resources. Others were challenged by the amount of time that it took to make modifications. Working closely with IT staff/departments from the beginning of the project and obtaining leadership and management support helped prioritize the initial implementation of these changes.

Another barrier was keeping tobacco systems changes prioritized due to competing initiatives within the health system, finite staff time and resources, and project staff turnover. Many grantees overcame these challenges by capitalizing on other internal and external priorities, sharing data to help prioritize the work, and training existing staff members as TTSs to serve as an internal tobacco cessation resource.

A third barrier was informing all staff about new tobacco protocols and procedures. Grantees that were implementing systems changes in several clinics or departments found it challenging to communicate with all staff. Therefore, they used multiple communication methods (eg, the intranet, staff newsletters) to reach staff. Tobacco team members attended regular clinic staff meetings to provide reminders about the new protocols and answer questions. Multiple grantees also used employee orientations to train new staff.

Sustainability

After grant funding ended, each system varied in the level of systems change activities that they were able to continue. The majority (54%-90%) of grant funds were used for personnel costs to implement systems changes. When grant funding ended, some grantees were unable to continue staffing the project, which limited or ended their ability to continue these activities. However, 1 grantee decided to create a permanent tobacco systems change position after the grant ended to continue and expand implementation of changes across their multistate system. Two other grantees continued some of the work by building it into existing staff responsibilities.

More than 1 grantee referred to their systems change grant as "seed money" that fostered their system's ability to prioritize addressing tobacco use, allowing them to build on those efforts after the grant ended. Creating a permanent tobacco systems change position is one example of this. A second example is continuing to work with

leadership to prioritize the systematic addressing of tobacco use within other areas (eg, behavioral health clinics, hospitals).

"The overall investment of the organization in making [tobacco] a priority is one of those big success factors from my perspective."

— Project manager

This work changed both clinical practice and social norms among providers and staff, which helped keep tobacco use prioritized. Many grantees developed new clinical workflows or rooming protocols, and all grantees modified their EHR to implement these new protocols. Integrating tobacco user identification and interventions into their standard of care fostered sustainability.

"The past 2 years have been transformative for the number of engaged clinicians, the level of tobacco impact understanding, and a commitment to continue to improve and better our processes."

— Clinic staff

"The standard operating procedures are now part of our universal system. So, the systems will continue, even though the grant period is ending." – Chief operating officer

DISCUSSION

Multiple factors influence how and to what extent health systems can implement systemic changes to improve identification and treatment of tobacco use. Our findings further describe both facilitators and barriers to implementing such changes and also align with the existing literature.

Engaging leadership at all levels of the organization facilitates project implementation and expansion, ensures that resources are available, and promotes sustainability. Rs.14,21 Cultivating clinic champions is also important to support system integration; in particular, physician champions can significantly improve clinic performance in the delivery of cessation interventions. The grantees in our study incorporated multiple levels of leadership across the organization into their projects and reported that this cultivated program support and garnered additional resources.

Implementing new protocols and building capacity through staff trainings are important facilitators of systems change^{13,14} and increases staff confidence in helping patients quit using tobacco.²¹ All of the grantees incorporated staff trainings into their projects. Some grantees also leveraged additional funds from other departments and grants to support trainings.

Additionally, effectively using data promotes action and facilitates sustainability.²³ The EHR can support routine clinical smoking cessation protocols and documention^{9,24-26} and is

a key component of systems change.¹⁴ Embedding clear workflows into the EHR and utilizing "smart forms" and reports to track and link tobacco use with other health conditions can facilitate improvements in patient care.²¹ All grantees modified their EHRs to collect data on how tobacco use was addressed during clinical encounters and to monitor performance. Data were shared with staff and leadership to create buy-in and improve processes.

Lastly, external influences, such as the Meaningful Use initiative, can affect program outcomes and sustainability. Capitalizing on environmental changes and existing initiatives can facilitate systems change, ¹⁴ and many grantees leveraged these factors to make the case for addressing tobacco use.

Limitations

There are several limitations to this study. This was an observational study and we cannot conclude that changes were made solely as a result of grant funding. Although the evaluation was informed by the literature, 4,8,9,14 it was not designed using a specific theory or framework. The primary goal of this evaluation was to identify key facilitators, barriers, and lessons learned from each grantee's work. It was not designed to measure long-term sustainability of changes or to identify the impact on patients (ie, patient satisfaction or quitting success). On-site observation of systems change implementation was not feasible given available resources. In addition, generalizability of these findings is limited due to the small number of health systems and the fact that all were located in Minnesota. However, many of the themes identified in this evaluation align with the health systems change literature. Furthermore, although the health systems varied in their size, reach, and population served, common themes emerged. Lastly, these health systems responded to a competitive request for proposals. Therefore, these systems had already identified tobacco use as a priority, which may have further facilitated systems change implementation.

CONCLUSIONS

Implementing health systems change interventions is an effective way to make tobacco dependence treatment a routine part of patient care compared with clinics and health systems that have not implemented such changes. Systems change activities can be tailored to meet the needs of diverse health systems. Developing system-level support, taking a team approach, capitalizing on internal and external priorities, implementing new protocols and training staff, modifying EHRs, and monitoring data and providing feedback may contribute to successful implementation. Furthermore, such changes can provide a renewed sense of enthusiasm for, and ownership of, tobacco treatment among providers and staff and can help prioritize addressing tobacco use.

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Making an Evidence-Based Case for Urgent Action to Address Clinician Burnout

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ore than half of all clinicians throughout the United States experience symptoms of burnout. ¹⁻⁴ The constellation of burnout, depression, and suicide in clinicians is now a public health epidemic that is having adverse effects on the quality and safety of healthcare. Burnout manifests itself by emotional exhaustion, no longer finding work as meaningful, and feelings of ineffectiveness, as well as a tendency to view patients, students, and colleagues as objects rather than as human beings. ⁵

The Problem

Burnout has many adverse consequences, including lower job satisfaction, higher turnover rates, increased rates of alcohol and drug abuse, and suicide, in addition to higher rates of medical errors and decreased patient satisfaction. 6-11 Although clinicians work to provide the highest quality of care for their patients, they often do not prioritize their own self-care. As a result, physicians, nurses, and other healthcare providers are often plagued by chronic conditions and mental health problems. Findings from a recent national study of nearly 1800 practicing nurses from 19 healthcare systems throughout the United States indicated that more than 50% reported being in suboptimal mental or physical health.3 Compared with nurses in better health, those in poorer health were 26% to 71% more likely to have made medical errors. Depression affected approximately one-third of the nurses and was the leading cause of medical errors. Further, those who worked 12-hour shifts had poorer health and made more errors than those who worked fewer hours. Nurses who perceived their work site as supportive of their health and well-being reported better health. Although registered nurses comprise the largest healthcare workforce, they have higher levels of depression, fewer healthy lifestyle behaviors, and poorer physical health than physicians and the general population.^{12,13}

Not only is burnout detrimental to clinician population health and the quality and safety of healthcare, but it also contributes to huge financial losses. It is estimated that \$500,000 to \$1 million in revenue is lost when a physician leaves a practice. The loss of a newly licensed registered nurse (NLRN) in the first year of practice costs the organization up to 3 times the nurse's annual salary when taking into consideration the cost of recruitment, training, and orientation. Nearly 60% of NLRNs leave their first professional position within the first 24 months, often due to high stress and burnout. 15

The Causes

There are multiple causes of burnout in clinicians, including both personal and system factors. Personal factors include not engaging in good self-care and healthy lifestyle behaviors, such as making time for regular physical activity, engaging in healthy eating, getting adequate sleep, and practicing daily stress reduction. Malalignment of a clinician's role with their purpose and passion also leads to issues with presenteeism and burnout. However, multiple factors within the healthcare system also contribute to clinician burnout and depression. These include poor staffing patterns that result in imbalanced clinician—patient ratios, long shifts, ongoing challenges with electronic health records that result in less time with patients, and pressure to increase caseloads. Loss of autonomy and a sense of powerlessness are other sources of burnout, along with

inadequate leadership support and work cultures that do not support clinician well-being. A lack of trust in, connection to, or support from coworkers also leads to social isolation and dissatisfaction and contributes to the problem of burnout.

Solutions

First and foremost, it is important to implement a multicomponent comprehensive strategy that entails building a culture of well-being in which healthy choices are the norm within a system. 16 There is a longtime saying that "culture eats strategy for breakfast, lunch, and dinner." Healthcare systems must build a culture of wellness in which leaders "walk the talk" and provide resources along with an infrastructure that supports it.¹⁷ If leaders and supervisors do not role model and support wellness, it is unlikely that their clinicians will engage in healthy behaviors. Wellness for clinicians needs to be built into the mission and values of the organization and made visible, as well as highlighted as important, throughout the onboarding of new clinicians to a system. Evidence-based interventions must be targeted to individual clinicians, the community of practice, the workplace culture and environment, and institutional policies. All clinicians should be made aware that their well-being is an important priority for the organization, and they should be made knowledgeable of wellness resources within the institution that are available to them. It is critical to have a "menu of options," as not all interventions will resonate with everyone. Grassroots tactics, such as wellness champions (individuals who volunteer a few hours every month to help build a culture of well-being in a system), are a low-cost but very effective strategy in helping to create a culture of well-being throughout an organization.18

Breaking down the stigma of mental health disorders for clinicians is important so that those at risk can receive evidence-based treatment. For healthcare systems that do not offer annual personalized health or wellness assessments for all employees, clinicians should be offered the opportunity to be screened for depression, anxiety, and burnout without concern regarding risk to their employment should they screen positive for mental health problems. Those at risk with symptoms should be offered evidence-based interventions, such as cognitive-behavioral therapy or cognitive-behavioral skills building, which have been shown to be effective in reducing these symptoms with clinicians.^{3,19} The Healer Education Assessment and Referral Program is a useful system that provides anonymous encrypted risk screening in partnership with the American Foundation for Suicide Prevention. Although mindfulness interventions with clinicians tend to be time intensive, findings from studies indicate that they have resulted in improvements in stress and anxiety.

Healthcare system issues that are known to cause burnout must be addressed. Staffing patterns must be improved where patient– provider ratios are high, and 12-hour shifts should be eliminated. Changes to the electronic health record system also are necessary so that clinicians can spend more time with their patients. Scribes should also be considered, as they could decrease the data entry workload of healthcare providers.

Return on Investment and Value of Investment

For every \$1 that is invested in wellness, findings from studies have indicated a \$3 to \$4 return on investment (ROI) for organizations that invest in building robust wellness programs for their employees.^{20,21} As an example, The Ohio State University, a large land grant university with a large academic health center comprising 7 hospitals, accelerated its wellness initiative and was the first institution of higher learning to appoint a chief wellness officer (CWO) in 2011 to spearhead a comprehensive integrated strategy designed to enhance the well-being of faculty, clinicians, staff, and students. At Ohio State, interventions are targeted to individuals, the social and family network, the culture and environment, and policy. For every dollar invested in wellness, the university has a \$3.65 ROI and is in a negative trend for healthcare spend for the third year in a row, whereas other institutions have been experiencing upward trends of 4% to 6% annually in healthcare spend. Value of investment is now being assessed beyond ROI and includes factors such as better morale, higher job satisfaction, less presenteeism and less absenteeism, and higher patient satisfaction.

An Urgent Call for Action by the National Academy of Medicine

Because of the disconcerting rate of clinician burnout, depression, and suicide, the National Academy of Medicine (NAM) launched an Action Collaborative on Clinician Well-being and Resilience in 2017 to enhance visibility on this issue and to develop evidence-based solutions to tackle this public health epidemic. As a key strategy to address this problem, the NAM collaborative has emphasized the urgent need for healthcare systems to prioritize the hiring of CWOs whose responsibility is to spearhead a culture of well-being and implement strategies to create a healthier workforce. CWOs should have a role within the C-suite to elevate the importance of the position and be equipped with the needed resources to effectively build cultures of well-being and implement evidence-based interventions, as described here, to enhance well-being in clinicians.

Conclusions

It takes numerous years, even decades, to translate evidence generated from research into real-world practice settings. ²³ The time gap between what is known and what is done is lethal. ²⁴ We must not wait decades to place high priority on preventing and reducing clinician burnout, depression, and suicide. Urgent attention and action on this public health epidemic will not only improve clinician well-being and save lives, but it will also improve the quality and safety of the US healthcare system, which the public and health of our nation rightly deserve.

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Leveraging Health Information Technology for Accountable Care: Thoughts From the Field

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ABSTRACT

This commentary provides several reflections on the recent annual report to Congress by the Office of the National Coordinator for Health Information Technology, which highlighted the key elements in its electronic health record (EHR) incentive programs, renamed Promoting Interoperability in 2018. We discuss 3 important aspects of health information technology (IT) in connection with interoperability and accountable care: health IT as a key element to care integration and delivery by health systems, the potential harm of EHR vendor consolidation, and overcoming barriers and realizing value in providers' experience with health IT.

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ince the enactment of the Health Information Technology for Economic and Clinical Health (HITECH) Act in 2009,1 more than \$30 billion has been paid to healthcare providers as incentives for adopting and using electronic health records (EHRs).2 In 2018, CMS renamed its EHR incentive programs (formerly known as Meaningful Use) to Promoting Interoperability (PI) and signaled the federal government's prioritization of interoperability and health information exchange in its continued efforts to advance health information technology (IT) in care delivery.² In its recent annual report to Congress, the Office of the National Coordinator for Health Information Technology (ONC) highlighted the key elements in PI and its vision of the future state of health IT.3 This commentary provides several reflections on the ONC report as well as on PI, based on the authors' work in the area of health IT. We discuss 3 important aspects of health IT in connection with interoperability: health IT implementation in health systems, the potential harm of EHR vendor consolidation, and overcoming barriers to effectively using health IT in provider experience.

Health IT Is a Key Component of Integrated Care Delivery by Health Systems

An important change in the landscape of healthcare over the past 2 decades is the proliferation of health systems, resulting from horizontal and vertical integration of healthcare providers.⁴ Functioning as parent organizations to hospitals, physician groups, and potentially other ambulatory care facilities (eg, skilled nursing facilities), health systems have the promise of delivering efficient and coordinated care.⁵ A key component of integrated care delivery is the implementation and management of health IT

at the health system level. When a health system takes a centralized approach to IT, all care delivery units within the system are likely to converge to a same EHR platform or even to a single-instance installation, potentially achieving better intrasystem interoperability. The stage 2 PI criteria "encourage the exchange of information in the most structured format possible" and thus may further incentivize centralized IT decision making among health systems. Moreover, health systems' postimplementation IT management strategies (eg, how the use of decision support tools is monitored) and governance (eg, the existence and the composition of an IT steering committee) directly impact the effectiveness of the actual use of health IT to improve outcomes.

However, to date, there is limited empirical understanding of health IT from a health system perspective. For example, how is health IT implemented differently across health systems? Are decisions related to health IT centralized in health systems? If so, is there still much variation in the actual use of specific health IT functionalities (eg, decision support tools) within large systems? Do health systems enhance patient access to their health records by prioritizing certain types of functionalities (eg, patient portals)? How well do ambulatory care units and hospitals within a health system "communicate" through the EHR? The answers to these questions would illuminate the role of health IT in health systems' efforts to achieve accountable care.

Equally important, there are still many independent ambulatory care providers (ie, ambulatory clinics and other outpatient care facilities outside health systems), and we know little about their adoption and use of health IT, especially in terms of the scope of functionalities. Despite the continuing trend of consolidations, independent providers collectively may remain an important segment of care delivery in the near future. According to a recent survey, 75% of solo practitioners plan to remain independent. In the context of PI, we need insights from investigations comparing independent providers with those within health systems regarding their current use of health IT, data sharing capabilities, and strategies to address interoperability.

EHR Vendor Consolidation Is Potentially Harmful to Interoperability and Data Sharing

A competitive health IT product market would be important to the pricing and quality of EHRs, and it has been argued that competition among EHR vendors can improve interoperability. Earlier studies have found that the EHR incentive programs under HITECH enhanced competition in the EHR market, as reflected in the increased number of vendors. However, more recent trends caution against being overoptimistic about the competitiveness of the EHR market. By 2018, 2 of the leading vendors, Cerner and Epic, together captured more than half of the acute care hospitals, and their market shares continue to grow. Although less documented, there is evidence of a similar trend in the ambulatory care EHR market. Based on the Minnesota e-Health Initiative

report,¹⁰ the proportion of ambulatory clinics in Minnesota using Epic increased from 51% in 2016 to 59% in 2018.

The ongoing focus on interoperability, along with provider consolidations, may have contributed to the increasing trend of concentration in the EHR market. Based on the American Hospital Association's Annual Survey and IT Supplement (2012-2016), a recent analysis reported that 35% of the hospitals switched to the EHR vendor of the acquiring health system within 3 years of consolidation (the proportion is likely to be higher after 3 years), whereas another 21% had the same EHR vendor before the consolidation.11 Interoperability has become a key determinant in EHR vendor choices¹⁰ and is likely to be further prioritized as PI progresses to the next stage. Health information can often be exchanged more efficiently (or more easily) among EHR platforms from the same vendor. Hence, it is not surprising to see health systems and providers converging to a concentrated set of vendors. Moreover, to protect or to further increase market shares through competitive advantages, current leading EHR vendors may even strategically create barriers to information exchange with competing products, so that new adopters (or switchers) will be somewhat "forced" to choose the vendors that currently dominate the market.¹² Reduced competition may also negatively affect the innovation, quality, and pricing of EHR products in general. In light of this, PI may need to be paired with regulatory (eg, data standards that encourage information exchange among different platforms) or incentive (eg, penalties for vendors that do not facilitate data sharing with competing platforms) policies to maintain a competitive EHR vendor market.

Overcoming Barriers to Better Health IT Experience for Providers

The ONC report outlined major barriers "associated with health IT capabilities and data sharing" (eg, financial and trust barriers) and those "associated with health care providers' experience with health IT" (eg, barriers related to documentation and usability). In particular, "lack of alignment with real-world clinical workflows" was mentioned among the usability issues. These barriers, many of which can be conceptually linked to the technology acceptance model and the resource-based theory, lead to frustration and lower the value of health IT as perceived by providers. The lack of interoperability is an important source of provider frustration in using EHRs, which in turn contributes to physician burnout. However, a recent study also found that the integration of ambulatory and hospital EHR systems, often an important step to improve interoperability, may decrease provider and patient satisfaction, partly due to the resulting changes in work processes. To

These findings suggest the complex and multifaceted nature of provider experience with EHRs. At the root of the problem may be the competing demand for customization and standardization at the same time. Population-based longitudinal studies are needed to help us better understand the prevalence and trends of specific barriers

among providers (eg, workflow changes or disruptive alerts), based on their actual experiences in using EHRs. Our empirical knowledge regarding barriers to effectively using health IT is particularly limited in ambulatory care. The success of PI relies on overcoming (or at least mitigating) some of these barriers. Coordinated efforts from health systems, frontline users, vendors, and policy makers are needed.

Conclusions

Health IT needs to be examined in the context of health systems' increasing role in care integration and delivery. How to promote interoperability while maintaining the competitiveness of the EHR vendor market is an important policy question to be addressed. Overcoming major barriers and improving provider experience with health IT is a key element to the success of achieving value and accountable care.

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CONVERSATIONS ON LOW-VALUE CARE

Reducing Low-Value Care May Mean Tough Conversations With Stakeholders

LAURA JOSZT, MA

educing low-value care can free up money to be spent on high-value services, but it's a delicate conversation to have, according to panelists at the University of Michigan Center for Value-Based Insurance Design (V-BID)'s V-BID Summit, held March 13 in Ann Arbor, Michigan.

The concept of value is well known among health policy experts, the payer community, and policy makers, but patients do not necessarily have the same idea of what value means, explained Daniel Carey, MD, secretary of Health and Human Resources for the Commonwealth of Virginia.

For instance, when the concept of value is introduced into a conversation around achieving access to care, some stakeholders might get the wrong idea, he said.

"For some, I found out in the last 6 or 8 months, that sounds like we're trying to reduce access...trying to take something away," Carey explained.

The language being used in these discussions is crucial, said Gwen Darien, BA, executive vice president for patient advocacy and engagement at the National Patient Advocate Foundation. Her organization represents approximately 150,000 patients who are primarily low income and underresourced and have trouble accessing quality, affordable, and equitable care.

Patients don't think about the mathematical formulas that policy makers and other experts in the field are using to define value and remove services that are considered low value because they might cause harm or be unnecessary. Instead, patients are concerned with a notion ingrained in American culture that if something is being taken away from them, then they're being stinted.

The conversation has to make it clear that services are being taken away in order to keep patients safe from harm, she added.

"A lot of the ways that we've talked about reducing low-value services [have] had to do with waste and waste in the system," Darien said. "People do not want to hear that anything that their doctor is prescribing for them is wasteful."

That's why explaining the harm of unnecessary or low-value services is important and can help the patient understand that the concern is keeping them safe.

"Less can often be more, because more can lead to unintended consequences," she added.

When Cigna talks about reducing low-value services, many times people interpret that as taking away care, according to John Keats, MD, national medical director for affordability and specialty partnerships at Cigna. But the company tries to be very deliberate in using evidence generated by other organizations and the recommendations

of the United States Preventive Services Task Force (USPSTF) to make decisions on low-value care that can be removed. A D rating from the USPSTF means that a service is not recommended to be used in asymptomatic patients.

One service that the panelists gave as an example of a low-value service that is used often and can be mostly cut out of the system is vitamin D screening. Cigna defined a population for whom vitamin D screening was recommended and would not pay for the test for any patients who didn't meet those criteria. According to Keats, a year later, doctors have stopped ordering the test and it has saved \$20 million.

"This whole idea of low-value care, I think, is great, but what I see time and again [is]...we have to be on the lookout for low-value physicians," Keats said. "At the end of the day, this is physician-driven."

Beth Bortz, president and chief executive officer of the Virginia Center for Health Innovation (VCHI), was in the audience and mentioned that some physicians don't even realize they're ordering the test as often as they are. She related the story of a member of USPSTF with whom VCHI was working in its quest to identify and measure uses of low-value care, who saw his data on vitamin D screening and thought that the data must have been wrong because he would never order that many vitamin D screenings. But when he dug into the data, he realized that a vitamin D screening was part of a bundled laboratory order, and he was ordering it far more often than he realized.

"I think that's a big piece of the secret sauce [to reducing use of low-value services]," Bortz said. "They have to sit with [the data], look at it, dig into it."

Carey admitted that there is pushback even from physicians when it comes to removing low-value care, and it's not because they think low-value care utilization isn't an issue. Most physicians agree with the concept of removing low-value care, but they worry that it will be overinterpreted and that the 5% or 10% who do need the service will miss out on it. The pushback, he clarified, has been on an "inflexible system" that doesn't allow leeway for someone to step off and provide services that might be of low value for the majority of people but fit for that specific patient.

All this work to remove low-value care can have real benefits for patients, as it saves money that might have been used on unnecessary services and frees those dollars up for high-quality services to be used. Darien used the example of lung cancer, where if money is freed up, all patients can get their tumors sequenced so they are given the right treatment that will have the best chance of working for them instead of being treated "scattershot."

"That's removing low-value care to add high-value care," she said. In Virginia, VCHI just received \$2.2 million to launch a 3-year statewide pilot to reduce the use of low-value care. The pilot will bring together 6 health systems and 3 clinically integrated networks to form a large-scale health system learning community and will also create an employer task force that includes employers, the Virginia Chamber of Commerce, and the Virginia Business Coalition. This is the next step after the work that Virginia has done to identify and measure low-value care utilization.

"Once we've moved the dial, then we'll explore the headroom," Carey said. "We need to turn waste into real dollars."

CONVERSATIONS ON LOW-VALUE CARE

Reducing Low-Value Care in Virginia

DANIEL CAREY, MD, SECRETARY OF HEALTH AND HUMAN RESOURCES,
COMMONWEALTH OF VIRGINIA

he conversation around the overuse of unnecessary or low-value care is an important one, and here in Virginia, it is one we have been engaged in for a while. Through the work of the nonprofit Virginia Center for Health Innovation (VCHI) and numerous partners, identifying opportunities to eliminate or reduce the use of low-value services demonstrates a potential savings of more than \$500 million annually in Virginia. The next step is to move from identification efforts to reduction efforts. Part of that shift involves getting people comfortable with the language of value and accepting what the science tells us: A significant portion of care is supported by outdated paradigms or practices that have been supplanted by new data and new approaches.

In 2018, Virginia expanded Medicaid, and to date, we have more than 280,000 Virginians newly enrolled. Many of these individuals now have health coverage for the first time in their adult lives for wellness checkups, trips to the emergency department, prescriptions, behavioral health and addiction services, and more. When we have been talking for so many years about the need to expand access, how do we suddenly shift the conversation to reducing low-value care?

For some, any conversation about value and cost is a conversation about reducing services and access. Instead, reducing low-value care is about shifting the focus onto what sort of care we are providing and making sure that individuals are getting not only access to quality-based care but also the right care for them in the right setting. A common refrain we hear on this issue is that we always thought more was better; however, we are learning that this is not always the case. Being strategic is better: looking at the data, looking at which tests and procedures the patient really needs, reducing unnecessary costs, and protecting the patient's safety at all times.

In Virginia, we have been lucky to have not just the data resources but also the political will to look at what is working and what is not and find out where we need to act. We know delivery system reforms that contain or reduce costs and improve quality can particularly benefit underserved populations, and states can be major drivers of this type of reform. We are committed to overcoming disparities in Medicaid while at the same time increasing access.

In March, Governor Ralph Northam announced that the VCHI received a \$2.2 million grant from Arnold Ventures to create a state-wide pilot aimed at reducing the provision of low-value healthcare in Virginia. It will start by employing a 2-part strategy to first reduce 7 sources of provider-driven low-value care and will then prioritize a next set of consumer-driven measures for phase 2. Part 1 of the strategy calls for the formation of a large-scale health system learning community. This learning community will engage 6 health systems and 3 clinically integrated networks representing more than 900 practice sites from 4 regions of Virginia. Part 2 of the strategy will see the creation of an employer task force on low-value healthcare. By engaging employers—especially larger ones that are self-insured—on the concepts of identifying and reducing low-value care, we will have a great opportunity to begin benefit redesign that enhances the reduction of low-value services.

Reducing the use of low-value care will require a collaborative, data-informed process. We know that there is a great deal of work ahead of us, but we think reducing low-value care is one of the best ways to make sure higher-value care is affordable. The keys to our success will be developing comfort across the commonwealth with

candid discussions about value and costs, as well as demonstrating that, through collaborative efforts, we can indeed significantly reduce services of no or low value.

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CONVERSATIONS ON LOW-VALUE CARE

Language Matters: Talking About Low-Value Healthcare With Patients

GWEN DARIEN, BA, EXECUTIVE VICE PRESIDENT, PATIENT ADVOCACY AND ENGAGEMENT, NATIONAL PATIENT ADVOCATE FOUNDATION AND PATIENT ADVOCATE FOUNDATION

et's say you're a physician and you are trying to explain to your patient why a particular procedure or treatment option does not represent a good value. You can talk about value in a variety of ways. You don't want to waste the time that it will take the patient, and the providers, to deliver that treatment. You can explain that all medical treatment costs money, and this option is expensive compared with other approaches. Or you can point out that all medical interventions carry some level of risk, and the benefits of this one are quite low relative to those potential risks. Whatever the reason, the treatment is considered low value.

Treatment choices should always provide the highest possible value to every patient within the parameters of evidence-based medicine. No one wants to waste resources or engage in practices that don't work very well, significantly impair quality of life, or incur costs equal to or higher than those of other effective treatments.

But for many patients, what makes sense to the physician and reflects evidence-based practice can seem abstract, impersonal, or even threatening. The problems can arise because although providers and patients often share the same goals for their care and treatment, they use different language or understand language differently when it comes to having discussions about what constitutes high- versus low-value treatment. The success or failure of conversations about value in healthcare frequently hinges on the words that are used in these discussions and the way that the options are explained to individual patients.

This cognitive and semantic dissonance begins with the word "value," a word that can mean many things depending on who says it and in what context. For healthcare providers, value generally connotes an algorithm that measures benefits versus costs. In most cases, value includes an assessment of the resources required to produce the desired outcomes. Resources almost always involve money, the cost to the system or the patient, but can also

encompass time or opportunity costs. At one end of the spectrum, treating advanced cancer that has failed to respond to other therapies with a fourth or fifth line of chemotherapy, which is expensive and causes significant adverse events, is very likely to be low value. At the other, an emergency department visit, x-ray, and specialist consultation for a simple ankle sprain may be less dramatic, but also clearly low value. Both interventions allocate resources for interventions that have very low probabilities of achieving good outcomes for the patient. Nonetheless, patients may push for these and other low-value approaches because they perceive a potential individual benefit.

When patients talk about value, however, resource allocations, direct costs, time, and the other factors that go into developing the algorithms are far from their minds. Patients generally aren't interested in or knowledgeable of mathematical formulas when they think about their healthcare decisions. They want to know if you can cure their cancer or, if you can't, how long and how well they can live. They want to be reassured that their swollen ankle isn't really broken. Value for patients means getting what matters most to that patient at that specific time in their lives. Value is most often an individual, personal assessment rather than an evidence-based, systemic one.

This can mean that when the doctor talks about a treatment being low value, the patient may hear that they are not worth the time, effort, or costs involved in delivering that treatment. That physician may be trying to save the patient from something that is unnecessary or ineffective, whereas patients perceive that something is being taken away from them. Doctors may frame their recommendations in terms of what is wasteful to the system. Patients think less about the system and far more about their individual needs and wants, and they tend not to want to hear that their treatment is "wasteful" or "low value."

Issues related to language and perception are often more prevalent and more serious with traditionally underserved populations. Medicaid patients and those who face severe financial toxicity can be highly sensitive to the idea that they, not the treatment options, are low value. They may fear that they are being offered lower-level care because they lack the resources to pay for the higher-end treatments available to others. For these vulnerable patients, words like "wasteful" or "high cost" can sound like code that means "I'm getting a lower tier of treatment."

Physicians and other healthcare providers who engage in treatment decision making with patients can avoid both these misunderstandings and their consequences by becoming more aware of the language they use when they talk to every patient about highand low-value care. It is critical and in everyone's best interest

to identify and reduce the low-value care that we deliver in our healthcare system. We do not have unlimited resources, and we do have to make rational, systemic decisions about how best to use what we have. In addition, we are currently in the midst of a remarkable era in which new, highly effective, individualized treatments are emerging. Removing the waste and low-benefit interventions from our medical care system is one path to freeing the resources needed to ensure that everyone has access to these advances. We can, for example, see real, documented high value in genomic sequencing for patients with lung cancer who can then benefit from targeted therapies rather than more scattershot, less effective treatments.

Patients need to understand the meaning of low- versus high-value treatments in terms that they understand and that address their values. Physicians can help this happen by talking specifically about benefits and risks for the individual patient, not the system. What we will learn from this procedure that will make a difference in how we treat your condition? What does this drug cost compared with one we think can be just as effective? Can we have a treatment plan that doesn't require you to come to the clinic as often? What can you realistically expect in terms of a longer life, or quality of life, if we do another round of chemotherapy instead of palliative care?

In the end, it is all about effective communications between providers and their patients, and effective communications depend on trust. Trust is never a one-way street. Patients, of course, need to trust their providers, but providers need to trust their patients to know what matters to them. Conversations that take place about what is high or low value have to keep the individual patient's care, safety, and best outcomes at their heart, and they must be true dialogues, shared and understood by everyone involved. That is, in itself, a very high value.

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CONVERSATIONS ON LOW-VALUE CARE

Curtailing Utilization of Low-Value Medical Care

JOHN P. KEATS, MD, NATIONAL MEDICAL DIRECTOR FOR AFFORDABILITY
AND SPECIALTY PARTNERSHIPS, CIGNA

America's healthcare dollars, and healthcare companies can go further and seize the opportunity to drive systemwide improvements to deliver more value for those we serve. Three years ago, Cigna created a national role dedicated to identifying opportunities to extend healthcare dollars while maintaining or improving the quality of care. (The term "Cigna" as used herein refers to operating subsidiaries of Cigna Corporation including Cigna Health and Life Insurance Company.) This is my role, and I am 100% focused on increasing the value of medical care that customers receive.

Unfortunately, in the United States, medical culture often assumes that more expensive care equates to better care. In fact, studies have shown that higher-quality care may cost less, and our goal as providers and payers of healthcare should be to move the healthcare system to one that is focused on value over volume.¹

To do so, we must identify and curtail the use of so-called low-value medical care.² These are tests, imaging studies, procedures, and medications that lack evidence of improved health outcomes and may even be harmful by leading to needless anxiety or further testing and procedures that carry the risk of complications. Although challenges exist in identifying sources of low-value care, there are several road maps we can follow.

One approach is to monitor the recommendations of the US Preventive Services Task Force (USPSTF), which is part of the federal government's Agency for Healthcare Research and Quality. USPSTF offers a category D recommendation that is defined as "not recommended" and states, "The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits." As healthcare companies, we can discourage use of these potentially ineffective or harmful practices by incorporating the USPSTF recommendation into appropriate coverage policies. Resulting coverage

determinations are balanced by appeal rights that allow for coverage when the potential benefit outweighs the risk for individuals and is deemed medically necessary.

Another source of low-value care identification is *Choosing Wisely*, a project of the ABIM Foundation.⁴ More than 80 medical specialty societies and other organizations have contributed lists of medical services to avoid or to at least be subject to a discussion of relative risks and benefits between healthcare providers and patients. These lists can also be utilized as support for coverage and reimbursement policy decisions.

Specialty societies may also address issues of low-value care through clinical guidelines, as was the case in 2015 when the Endocrine Society released guidance regarding routine screening for vitamin D deficiency. The screening had become a widespread practice when the organization came out with guidance that stated, "Screening is recommended for individuals at risk for vitamin D deficiency. Population screening or screening of those not at risk is contraindicated." Based on this position by the professional society of the country's leading experts in the field, Cigna began a process to examine utilization and found that many customers were receiving this unnecessary and potentially misleading test. Through Cigna's purposefully cautious and deliberate process, it was determined that we should no longer reimburse vitamin D testing when done as a routine screening in populations not at risk for deficiency. The new policy went into effect in early 2018, and we were the first major healthcare company to adopt this position. Since that time, Cigna has reduced spending on unnecessary vitamin D testing by more than \$20 million (Cigna Business Analytics, unpublished data, April 2019).

Ultimately, eliminating low-value care in the US healthcare system will depend in large part on changing healthcare provider behavior. Providers need to be encouraged to monitor and adhere to the recommendations of expert voices like the USPSTF, *Choosing Wisely*, and their own professional organizations. Healthcare companies need to educate providers and customers alike to question

care that is unnecessary or of unproven value. Working together, we can help eliminate wasteful spending and deliver on our goal to improve the health of Americans by delivering higher-quality care at lower cost.

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