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# 6 Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis: One Decade Later

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## ABSTRACT

In 2012, the National Academies of Sciences, Engineering, and Medicine convened a committee charged with addressing the quality of cancer care in the United States and providing recommendations to policymakers and the cancer care community on strategies to improve cancer care delivery from the time of diagnosis through end-of-life. The resulting committee report, titled *Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis* (2013), presented a conceptual framework that included six interconnected components of care with corresponding recommendations. Over the past decade, the delivery of high-quality of cancer care has become more challenging and increasingly demanding on the workforce. In this manuscript, we review the goals and recommendations made in 2013, describe progress to date, and offer insights into future dedicated efforts and/or new strategies needed to achieve high-quality cancer care.

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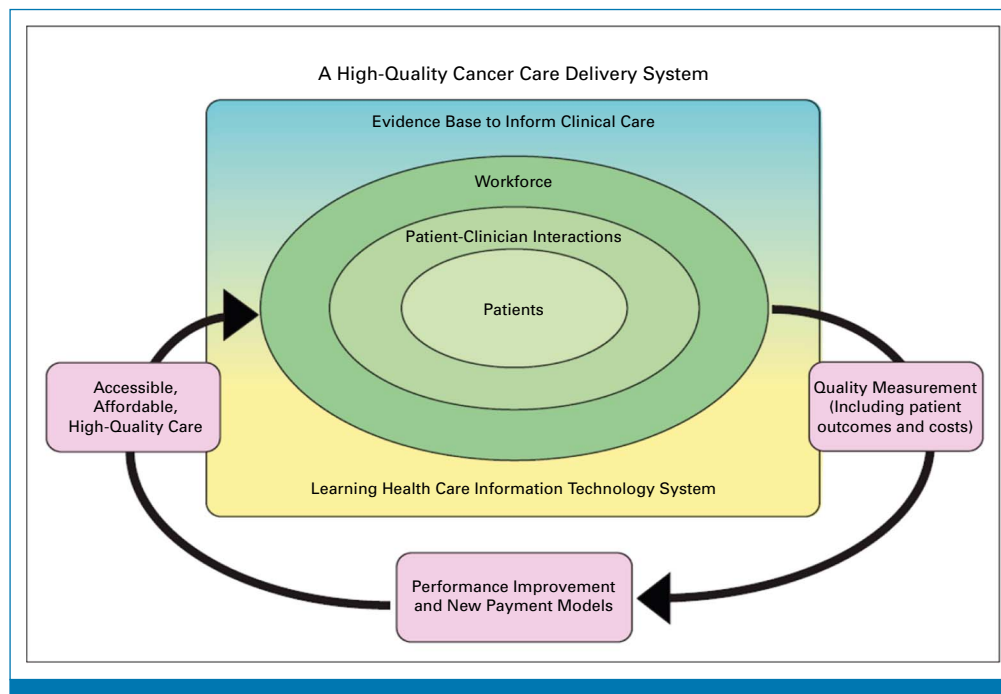
## BACKGROUND

In 2012, the National Academies of Sciences, Engineering, and Medicine (NASEM) convened a committee charged with addressing the quality of cancer care in the United States and providing recommendations to policymakers and the cancer care community on strategies to improve cancer care delivery from the time of diagnosis through end of life. In particular, the committee considered the projected rapid growth of older adults, leading to a substantial increase in cancer incidence, adding to the approximately 1.6 million new cancer cases diagnosed each year and the 14 million people already living with a previous diagnosis of cancer. The committee concluded that the cancer care delivery system was in crisis. Key issues included the lack of patient-centered care, failure to routinely deliver palliative care for symptom management, and treatment decisions about care that were often not evidence-based. Costs of cancer care were also rising, making care less affordable for patients and their families, and exacerbating existing disparities in access to care. Growing shortages of health professionals skilled in providing cancer care further threatened the situation.

The resulting committee report, titled *Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis*,<sup>1</sup> presented a conceptual framework that included six interconnected components of care: (1) engaged patients; (2) adequately staffed, trained, and coordinated workforce; (3) evidence-based cancer care; (4) learning health care information technology; (5) translation of evidence into clinical practice, quality measurement, and performance

improvement; and (6) accessible and affordable care (Fig 1).<sup>1</sup> The committee proposed 10 bold and aspirational goals, each with recommendations, charging diverse stakeholders (cancer care teams, patients and their families, researchers, policymakers, and payers), as well as the US Department of Health and Human Services (HHS), other federal agencies, and industry to work together to develop a higher-quality care delivery system (Table 1).

Over the past decade, the cancer care community has made progress, although it has been slow and incremental. Improving the quality of cancer care is an ambitious and complex endeavor. As the NASEM committee highlighted, it requires a multifaceted plan, engagement of a variety of stakeholders, and collective will. The delivery of high-quality of cancer care has also become more challenging. The number of survivors has grown to an estimated at 19 million and care is more complex. Advances in genomics, targeted therapies, and immunotherapies have increased the efficacy, precision, and cost of care, and expanding the numbers of specialists who are part of the cancer care team. This has occurred in the context of a worsening workforce crisis, including clinical burnout, poor work satisfaction, decreased physician autonomy, information overload, inefficiencies of electronic health records (EHRs), as well as consolidation of health care systems and growing calls for unionization.<sup>2-5</sup> Despite the benefits associated with insurance expansion because of the Affordable Care Act (ACA), disparities in care and poor outcomes persist. On top of that, COVID-19, a national public health and medical crisis ensued, which diverted attention and resources away from system reforms to crisis management.



**FIG 1.** An illustration of the 2013 National Academies of Sciences, Engineering and Medicine committee's conceptual framework for improving the quality of cancer care. Credit: Institute of Medicine. 2013. *Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis*. <https://doi.org/10.17226/18359>. Reproduced with permission from the National Academy of Sciences, Courtesy of the National Academies Press, Washington, DC.

In this manuscript, we review the goals and recommendations made in 2013 NASEM report and describe progress made to date despite the challenges noted in the intervening years. We address remaining challenges and offer insights into areas in need of dedicated effort and/or new strategies to achieve high-quality care. This critical analysis draws from a recent NASEM-ASCO cosponsored workshop on *Assessing and Advancing Progress in the Delivery of High-Quality Cancer Care*.<sup>6</sup>

## ENGAGED PATIENTS

The delivery of high-quality cancer care requires patients to be at the center of care and supported in making informed medical decisions that are consistent with their needs, values, and preferences. As such, the 2013 NASEM report emphasized that the “cancer care team should provide patients and their families with understandable information on cancer prognosis, treatment benefits and harms, palliative care, psychosocial support, and estimates of the total and out-of-pocket costs of cancer care.”<sup>11</sup> Furthermore, “in the setting of advanced cancer, the cancer care team should provide patients with end-of-life care consistent with their needs, values, and preferences.”<sup>11</sup> The most significant impact of these recommendations was the adoption by the Centers for Medicare and Medicaid Services (CMS) Innovation Center

of the NASEM report's 13 component care management plan in the Oncology Care Model (OCM) that ran from 2016 to 2022. CMS designed OCM to promote oncology practice transformation by linking performance metrics to alternative payment strategies with the goal of improving the quality and value of cancer care for patients receiving chemotherapy. The model required practices to provide treatment care plans, specifically including the estimated total and out-of-pocket costs as well as a plan for communicating about prognosis, psychosocial needs, and palliative care.<sup>7-9</sup> Despite its expected benefits, OCM led to only modest improvements in cost and health care utilization.<sup>10-12</sup> The experience of participants (both patients and medical professionals), however, was positive,<sup>13</sup> and now CMS has embarked on a new experimental payment model called the Enhancing Oncology Model (EOM) that builds off the lessons learned from OCM.<sup>14</sup>

Beyond the OCM, care plan implementation has primarily focused on the post-treatment phase, with many described limitations because of barriers to their use and inability to demonstrate patient benefit.<sup>15,16</sup> At the federal level, advocacy organizations have focused on passing legislation to promote better communication of treatment plans and survivorship care planning through the Comprehensive Cancer Survivorship Act<sup>17</sup>; but the Congress has not passed the Act into law.

**TABLE 1. Goals and Recommendations Made by the National Academies of Sciences, Engineering and Medicine 2013 Committee and Examples of Progress to Date**

Recommendation	Example of Progress
<b>Goal 1:</b> The cancer care team should provide patients and their families with understandable information on cancer prognosis, treatment benefits and harms, palliative care, psychosocial support, and estimates of the total and out-of-pocket costs of cancer care	
The NCI, the Centers for Medicare & Medicaid Services, the Patient-Centered Outcomes Research Institute, as well as patient advocacy organizations, professional organizations, and other public and private stakeholders should improve the development of this information <sup>a</sup> and decision aids and make them available through print, electronic, and social media	<i>Decision aids continue to be developed and evaluated, although limited focus on the treatment, survivorship, and end-of-life care in oncology</i>
Professional educational programs for members of the cancer care team should provide comprehensive and formal training in communication	<i>ASCO communication guideline developed Communication training programs are available, although implementation uncertain</i>
The cancer care team should communicate and personalize this information <sup>a</sup> for their patients at key decision points along the continuum of cancer care, using decision aids when available	<i>The implementation of decision aids mostly focusing on early phases of the cancer care continuum, with limited implementation for treatment, survivorship, and end-of-life care</i>
The cancer care team should collaborate with their patients to develop a care plan that reflects their patients' needs, values, and preferences, and considers palliative care needs and psychosocial support across the cancer care continuum	<i>Implementation of care plans mainly focusing on survivorship, with limited benefits on outcomes</i>
The Centers for Medicare & Medicaid Services and other payers should design, implement, and evaluate innovative payment models that incentivize the cancer care team to discuss this information <sup>a</sup> with their patients and document their discussions in each patient's care plan	<i>The OCM implementation showed improved perception of patient-centered care and experiences, although limited benefit on health care utilization and costs</i>
<b>Goal 2:</b> In the setting of advanced cancer, the cancer care team should provide patients with end-of-life care consistent with their needs, values, and preferences	
Professional educational programs for members of the cancer care team should provide comprehensive and formal training in end-of-life communication	<i>Training programs are available for cancer care team members, including focus on end-of-life care, but need to expand reach and implementation</i>
The cancer care team should revisit and implement their patients' advance care plans	<i>Implementation of advance care planning documentation in clinical practice seems limited, although billing codes have been developed</i>
The cancer care team should place a primary emphasis on providing cancer patients with palliative care, psychosocial support, and timely referral to hospice care for end-of-life care	<i>Professional oncology organizations have recommended the provision of such care, although remaining barriers exist in implementation in clinical practice</i>
The Centers for Medicare & Medicaid Services and other payers should design, implement, and evaluate innovative payment models that incentivize the cancer care team to counsel their patients about advance care planning and timely referral to hospice care for end-of-life care	<i>CMS billing code for the provision of advance care planning has been developed, although seems to be lacking in uptake</i>
<b>Goal 3:</b> Members of the cancer care team should coordinate with each other and with primary/geriatrics and specialist care teams to implement patients' care plans and deliver comprehensive, efficient, and patient-centered care	
Federal and state legislative and regulatory bodies should eliminate reimbursement and scope-of-practice barriers to team-based care	<i>State-based initiatives underway, with barriers being removed during the COVID-19 pandemic</i>
Academic institutions and professional societies should develop inter-professional education programs	<i>Initiatives by various organizations have been developed</i>
Congress should fund the National Workforce Commission	<i>None</i>
<b>Goal 4:</b> All individuals caring for patients with cancer should have appropriate core competencies	
Professional organizations should define cancer core competencies for their memberships	<i>Not clear efforts in this regard</i>
Cancer care delivery organizations should require cancer care teams to have cancer core competencies to deliver high-quality cancer care, as demonstrated through training, certification, or credentials	<i>None</i>
Organizations responsible for accreditation, certification, and training of nononcology clinicians should promote the development of relevant core competencies across the cancer care continuum	<i>Minimal efforts, cardio-oncology emerging as a leader in this regard. Other specialties also developing focus on oncology</i>
The HHS and other funders should fund demonstration projects to train family caregivers and direct care workers in relevant core competencies related to caring for patients with cancer	<i>Some efforts underway, although limited</i>
<b>Goal 5:</b> Expand the breadth of data collected on cancer interventions for older adults and individuals with multiple comorbid conditions	
The NCI, the Agency for Healthcare Research and Quality, the Patient-Centered Outcomes Research Institute, and other comparative effectiveness research funders should require researchers evaluating the role of standard and novel interventions and technologies used in cancer care to include a plan to study a population that mirrors the age distribution and health risk profile of patients with the disease	<i>Some efforts underway, spearheaded by the FDA, with ASCO involvement</i>

(continued on following page)

**TABLE 1. Goals and Recommendations Made by the National Academies of Sciences, Engineering and Medicine 2013 Committee and Examples of Progress to Date (continued)**

Recommendation	Example of Progress
Congress should amend patent law to provide patent extensions of up to 6 months for companies that conduct clinical trials of new cancer treatments in older adults or patients with multiple comorbidities	None
<b>Goal 6:</b> Expand the depth of data available for assessing interventions	
The NCI should build on ongoing efforts and work with other federal agencies, the Patient-Centered Outcomes Research Institute, clinical and health services researchers, clinicians, and patients to develop a common set of data elements that captures PROs, relevant patient characteristics, and health behaviors that researchers should collect from randomized clinical trials and observational studies	<i>Patient-centered outcome measures being developed and included in clinical studies</i>
<b>Goal 7:</b> Develop an ethically sound learning health care IT system for cancer that enables real-time analysis of data from patients with cancer in a variety of care settings	
Professional organizations should design and implement the digital infrastructure and analytics necessary to enable continuous learning in cancer care	<i>Some efforts by ASCO, including CancerLinQ, which ConcertAI purchased in 2023</i>
The HHS should support the development and integration of a learning health care IT system for cancer	<i>The 21st Century Cures Act is intended to improve the interoperability of health data, which is critical to the creation of a learning health care IT system</i>
The Centers for Medicare & Medicaid Services and other payers should create incentives for clinicians to participate in this learning health care system for cancer, as it develops	None
<b>Goal 8:</b> Develop a national quality reporting program for cancer care as part of a learning health care system	
Create and implement a formal long-term strategy for publicly reporting quality measures for cancer care that leverages existing efforts	None
Prioritize, fund, and direct the development of meaningful quality measures for cancer care with a focus on outcome measures and with performance targets for use in publicly reporting the performance of institutions, practices, and individual clinicians	<i>Some efforts by ASCO QOPI, and now ASCO Certified, and CMS</i>
Implement a coordinated, transparent reporting infrastructure that meets the needs of all stakeholders, including patients, and is integrated into a learning health care system	None
<b>Goal 9:</b> Reduce disparities in access to cancer care for vulnerable and underserved populations	
The HHS should develop a national strategy that leverages existing efforts by public and private organizations, support the development of innovative programs, identify and disseminate effective community interventions, and provide ongoing support to successful existing community interventions	<i>Recent billing codes approved for patient navigation may drive progress in this regard</i>
<b>Goal 10:</b> Improve the affordability of cancer care by leveraging existing efforts to reform payment and eliminate waste	
Professional societies should identify and publicly disseminate evidence-based information about cancer care practices that are unnecessary or where the harm may outweigh the benefits	<i>ASCO, NCCN guidelines assess evidence-based interventions</i>
The Centers for Medicare & Medicaid Services and other payers should develop payment policies that reflect the evidence-based findings of the professional societies	<i>Guidelines issues by professional societies likely being considered</i>
The Centers for Medicare & Medicaid Services and other payers should design and evaluate new payment models that incentivize the cancer care team to provide care that is based on the best available evidence and aligns with their patients' needs, values, and preferences	<i>OCM has moved this along. The Enhanced Oncology Model will be implemented and evaluated</i>
If evaluations of specific payment models demonstrate increased quality and affordability, the Centers for Medicare & Medicaid Services and other payers should rapidly transition from traditional fee-for-service reimbursements to new payment models	None

Abbreviations: CMS, Centers for Medicare and Medicaid Services; FDA, US Food and Drug Administration; HHS, US Department of Health and Human Services; IT, Information Technology; NCCN, National Comprehensive Cancer Network; NCI, National Cancer Institute; OCM, Oncology Care Model; PRO, patient-reported outcome; QOPI, Quality Oncology Practice Initiative.

<sup>a</sup>Cancer prognosis, treatment benefits and harms, palliative care, psychosocial support, and estimates of the total and out-of-pocket costs of cancer care.

The 2013 NASEM report also highlighted the need for better communication between health professionals and patients with cancer, recommending the use of decision aids and formal training in communication skills. Although research has confirmed that decision aids improve patient decision making,<sup>18,19</sup> they are rarely used in practice.<sup>20,21</sup> Formal communication training, such as that developed by VitalTalk and other organizations aiming to enhance clinician communication skills across disciplines, remains rare for oncology fellows and clinicians.<sup>22-26</sup> In 2017, ASCO released a patient-clinician communication guideline, recognizing the ongoing need for more effective communication strategies between clinicians and patients, specifically emphasizing strategies for communicating with those who do not share the language of the clinician, those with low health literacy and numeracy, as well as populations of underserved and marginalized populations.<sup>27</sup>

Additionally, the 2013 NASEM report emphasized the need for the cancer care delivery system to pay more attention to those living with advanced and metastatic cancers, mainly focusing on palliative and end-of-life care. Given tremendous progress made in the development of novel immunotherapy agents, prognosis for many cancers has markedly improved, leading to an emerging focus on those living longer with advanced and metastatic cancer. There is now a critical need for research as well as supportive, survivorship care for this growing population,<sup>28,29</sup> efforts that have been advanced by the recent Multinational Association for Supportive Care in Cancer-ASCO standards and practice recommendations.<sup>30</sup>

### **ADEQUATELY STAFFED, TRAINED, AND COORDINATED WORKFORCE**

The 2013 NASEM report highlighted the need to develop a health care “system that provides competent, trusted, interprofessional cancer care teams aligned with patients’ needs, values, and preferences, as well as coordinated with the patients’ noncancer care teams and their caregivers.”<sup>31</sup> To advance this goal, the committee recommended that professional educational programs for members of the cancer care team provide comprehensive and formal training in end-of-life communication that is inclusive of all populations. As described above, several organizations have developed communication training programs; however, their reach and implementation have been limited. Furthermore, the Oncology Nursing Society has a training module<sup>31</sup> and recently endorsed the Palliative Care and Hospice Education and Training Act, which aims to provide government funding for Palliative Care and Hospice Education Centers that improve the training of health professionals in palliative care; however, the Congress has not passed the Act.<sup>32</sup> National and international professional organizations have also supported the need for palliative care, advance care planning, and psychosocial screening care through guidelines and statements (ASCO, International Psycho-Oncology Society, and National Comprehensive Cancer Network [NCCN]) but there is little evidence of

integration into routine cancer care.<sup>33-37</sup> At the federal level, CMS introduced a billing code in 2016 to reimburse clinicians for advanced care planning discussion, although the code is rarely used.<sup>38,39</sup>

Given the growing need for multidisciplinary and multi-specialty collaboration in the care for patients with cancer, the committee recommended the expansion of (and training in) interprofessional team-based practice. Although some progress has been made, gaps remain.<sup>40-44</sup> Core competencies for health care professionals involved in cancer care exist but they are not typically mandated.<sup>45-50</sup> Although Maintenance of Certification by the American Board of Internal Medicine serves as a mechanism to keep clinicians current on required knowledge and skills, there has been growing controversy about the certification process, particularly given the rapid advances in medical science.<sup>51</sup>

At the time of the NASEM report, C-Change (now dissolved) and other organizations championed the need for education of nononcology clinicians in the treatment of patients with cancer.<sup>52</sup> Recently, cardio-oncology has emerged as a medical specialty highly engaged in developing competencies and training among cardiologists for cancer care.<sup>53</sup> Similar efforts are developing in endocrinology,<sup>54</sup> especially because of the toxicities of emerging immunotherapy regimens. NASEM recently hosted a workshop focusing on the development of a multispecialty and multidisciplinary workforce to care for cancer, which brought attention to the issue.<sup>55</sup>

In addition to the health care workforce, the 2013 NASEM committee highlighted the need to address the role of informal caregivers, an effort that has been reinforced by NASEM, National Cancer Institute (NCI), and others, although the benefits of such efforts are not yet clear.<sup>56,57</sup>

Interestingly, the NASEM committee took an early position in discussing telemedicine (or telehealth) as a strategy to improve communication, address projected workforce shortages, and improve access to care, especially for patients living in rural areas or those who are more vulnerable and within underserved communities. Although telemedicine initiatives existed in 2013, there were many obstacles to implementation, specifically billing, reimbursement, and delivery across state lines, given professional licensing requirements. The COVID-19 pandemic removed many of these barriers and resulted in an unprecedented and immediate surge in utilization.<sup>58</sup> Since the end of the public health emergency rules, however, restrictions in full use of telemedicine have reappeared. Ongoing efforts are aimed at sustaining the billing and reimbursement for remote care, allowing clinical practice across state lines, and providing guidance on the use of telemedicine in practice.<sup>59,60</sup> The pandemic has also uncovered and exacerbated a preexisting level of burnout in the health care workforce, which poses a significant threat to the future of cancer care delivery.<sup>3,61-63</sup> Going forward, there is a need to remain focused on improving oncology care competencies, coordination, and

communication, while reducing burdens of practice for clinicians. Many organizations have now acknowledged the deleterious effects of clinician burnout, and efforts to address these are underway and will be critical to sustain the cancer care workforce.<sup>64-67</sup>

## EVIDENCE-BASED CANCER CARE

The 2013 NASEM report found persistent gaps in the evidence base for treating patients with cancer, especially around breadth of data collected on older adults and individuals with multiple comorbid conditions, as well as depth of data availability including capture of outcomes that are most relevant for patients. The late Arti Hurria, MD, a member of the NASEM committee, was a leader and dedicated advocate for advancing these recommendations.<sup>68</sup> Her efforts, along with others in the field, led to multiple initiatives and public workshops aimed at identifying strategies to improve research on older adults, including by the US Food and Drug Administration (FDA), ASCO, NCI, NASEM, and others.<sup>69-73</sup> Additionally, ASCO, FDA, and Friends of Cancer Research collaborated on a related project to broaden clinical trial eligibility criteria (eg, including patients with comorbidities) that limit enrollment of representative older adults.<sup>74,75</sup> Nevertheless, there has been limited change in the number of older adults enrolled in clinical trials where most new therapies are tested.<sup>76,77</sup>

Although the NASEM committee's recommendation that there be patent extensions for companies that conduct clinical trials of new cancer treatments in older adults or patients with multiple comorbidities has not moved forward, other recent efforts may achieve the same result. The Food and Drug Omnibus Reform Act of 2022 (FDORA) mandates by law that sponsors of phase three studies or other pivotal studies submit diversity action plans to FDA by the time they submit their study protocols with the goal of generating data on representative patient populations.<sup>78</sup> In 2024, the FDA released draft guidance for implementing FDORA, including the format and content of diversity action plans. It specifically highlights age as a dimension of diversity.<sup>79</sup> At the same time, FDA has also indicated a willingness to require postmarketing studies to obtain data on populations underrepresented premarket trials.<sup>80</sup> Taken together, the FDA is taking steps to create new incentives for industry to increase the enrollment of older adults on their trials. There is also a heightened interest since the publication of the NASEM report in evaluating disparities and promoting research focusing on diverse, vulnerable, and marginalized populations that goes beyond inclusion of older patients.<sup>81,82</sup>

Additionally, the NASEM committee recommended a standardized approach to collect "patient-reported outcomes [PROs], relevant patient characteristics, and health behaviors that researchers should collect from randomized clinical trials and observational studies."<sup>81</sup> There has been progress with development of the PRO-CTCAE to monitor toxicity of

treatments from the patient perspective, and guidance from the FDA and Friends of Cancer Research on inclusion of PROs in trials.<sup>83-86</sup> ASCO and the Cancer and Aging Research group have led efforts to improve the collection of data on relevant patient characteristics through their promotion of geriatric assessments in cancer care.<sup>87,88</sup> NCI and American Association for Cancer Research also developed standard measures for the collection of tobacco use in clinical trials.<sup>89</sup> Nevertheless, collection of behavioral data remains limited with few standardized formats for collection. Additional efforts to implement routine collection of PROs and behavioral data will require active translation of research strategies into practice.<sup>90-92</sup>

## LEARNING HEALTH CARE INFORMATION TECHNOLOGY SYSTEM FOR CANCER

In addition to improving the breadth and depth of data collection, the NASEM committee recognized that health care systems themselves can be used as laboratories where real-time analysis of data may be generated and rapidly applied. The dimensions of a learning health care system outlined in the report included digital capture of patient experience at the point of care, clinical decision support embedded in clinical workflows, common data standards, and the continuous and automatic incorporation of data from different sources. Some steps toward this vision have been achieved.<sup>93</sup> The health care delivery system has universally adopted EHRs. There are existing repositories of longitudinal clinical data, including CancerLinQ and other commercial entities (eg, Flatiron).<sup>94,95</sup> The 21st Century Cures Act of 2016 was intended to accelerate the pace of innovation and expand the use of real-world evidence, including requirements for data transmission standards. The FDA released guidance about the use of real-world evidence in regulatory decision making.<sup>96</sup> There have also been efforts to standardize data captured in oncology EHRs, such as minimal Common Oncology Data Elements.<sup>97</sup>

Despite progress, the full vision of a learning health care system has not been achieved. Clinicians do not have real-time access to knowledge in existing platforms, and clinical decision support is often not embedded into workflows. The existing learning health care system platforms have struggled to compile data continuously and automatically from multiple sources, and identification and appropriate surveillance of cancer survivors for subsequent cancers as well as late and long-term effects has been lacking. EHRs continue to focus on billing rather than clinical care, quality improvement, or research, often leading to frustrations among clinical staff needing to navigate the system. To move forward, HHS and CMS should take a larger role in advancing learning health care systems that provide only the needed information at the bedside. The future of such efforts may also require investments from commercial entities. Artificial intelligence and machine learning are rapidly advancing and will undoubtedly play a prominent role in clinical care and research over the upcoming decade.<sup>98</sup> These efforts will have

the benefit of helping to address many unanswered questions in medicine, as well as providing data on groups traditionally underrepresented in clinical trials.

## TRANSLATING EVIDENCE INTO CLINICAL PRACTICE, QUALITY MEASUREMENT, AND PERFORMANCE IMPROVEMENT

Although the 2013 NASEM committee recommended the “creation and implementation of a formal long-term strategy for publicly reporting quality measures for cancer care that leverages existing efforts,”<sup>91</sup> this has not been actualized. There has been progress in the development of quality measures for cancer care with a focus on outcome measures, much through the ASCO Quality Oncology Practice Initiative program and through CMS as part of its Merit-based Incentive Payment System and Advanced Alternative Payment Models (including the EOM).<sup>99-101</sup> However, there are persistent gaps in existing measures, particularly in the post-treatment phase of cancer care. With the goal of promoting the evaluation of cancer survivorship care, the NCI Office of Cancer Survivorship and the Veterans Administration recently launched an initiative to develop standards that may be applied and measured across health care settings.<sup>102,103</sup> Although recommended, reporting the quality of cancer care is not publicly available.

The larger goal of the NASEM recommendation related to quality metrics was to create a system to measure and assess the quality of care, target areas for improvement, and then measure whether the changes led to the desired results. To advance this goal, ASCO recently launched the ASCO Certified program,<sup>104</sup> which provides a single set of standards, the ASCO-Community Oncology Alliance Oncology Medical Home standards, for practices to measure the quality of their care.<sup>105</sup> The standards target core elements of high-quality cancer care, including patient engagement, access to care, evidenced-based medicine, team-based care, quality improvements, palliative and end-of-life care, and chemotherapy safety. Certification requires practices to conduct ongoing assessments and quality improvement projects. The program may also address the NASEM committee’s call for public reporting of quality metrics by providing a public-facing acknowledgment of the quality of care provided by certified practices. Nevertheless, the program is early in implementation and will need to be assessed for meeting its stated objectives.

## ACCESSIBLE AND AFFORDABLE CANCER CARE

The ACA led to critical improvements in access and affordability, particularly for patients with cancer, with removal of lifetime caps on spending, providing family health insurance coverage to dependents up to age 26 years, offering preventive care, and expansion of enrollees in both private and public health care plans, among others. However, accessibility and affordability of cancer care remains problematic. The NASEM committee emphasized the need to

continue efforts to “reduce disparities in access to cancer care for vulnerable and underserved populations.”<sup>91</sup> The COVID-19 pandemic heightened disparities but also emphasized the structural racism in health care, and hence put a new focus on needed interventions to reduce disparities experienced by those by racial and ethnic minority groups as well as other medically underserved and/or marginalized populations. Going forward, it will be important to evaluate the effects of these changes on health care outcomes.

Another recommendation made by the committee was for HHS to “develop a national strategy that leverages existing efforts by public and private organizations, support the development of innovative programs, identify and disseminate effective community interventions, and provide ongoing support to successful existing community interventions.”<sup>91</sup> A major success in this regard was the recent passage of the CMS 2024 Medicare Physician Fee Schedule Final rule, under the Moonshot Initiative, which allows patient navigation to be billed and reimbursed by Medicare, as well as private insurers.<sup>106</sup> Patient navigation has been extensively evaluated across the cancer care continuum in diverse communities, and with the additional reimbursement, has potential to reduce disparities in care.<sup>107</sup> Furthermore, the NASEM committee recognized in addition to payment reform (eg, OCM, and the newly launched EOM) that it was important to eliminate waste in health care, and to do so, professional societies should play a role in identifying and promoting the use of evidence-based practices. ASCO and the NCCN have been at the forefront of developing guidelines across the cancer care continuum and continue to do so. Choosing Wisely, developed by the American Board of Internal Medicine in 2012, collaborated with national organizations, including ASCO, to identify interventions that were/were not evidence-based. This effort ended in 2023 and unfortunately had little impact.<sup>108</sup> Access and affordability of cancer care will remain a challenge, but all stakeholders should remain fully dedicated to addressing and mitigating the barriers in attaining quality care for all those affected by the cancer.

In conclusion, the 2013 NASEM report was forward-looking and aspirational, envisioning a patient-centered cancer care delivery system that would meet the challenges of an aging population and an increasingly fragmented health care system.<sup>109-111</sup> Over the past decade, national organizations and champion organizations have launched initiatives intended to improve aspects of the health care delivery system as recommended in the report, such as the development and testing of innovative payment models, efforts to increase administration of palliative and end-of-life care, and expansion of research priorities to include diverse patient populations, among others. However, most of these efforts have unfortunately been incremental and have not led to big improvements in cancer care.

At the same time, new challenges to the quality of cancer care have emerged, which have further complicated progress. The cost of drugs and other diagnostic/therapeutic strategies



used as part of cancer care today have exploded well beyond what was imagined in 2013. There was hope in 2013 that EHRs and other information technology would support a learning health system and easy/automatic assessments of health care quality and value, and instead pressures on clinicians have consistently accelerated and administrative burdens have grown. The issue of access and disparities, which was only briefly touched on in the report, has become a major challenge in cancer care delivery today. The ACA was in its infancy at the time that the report was published, and over the subsequent decade, faced numerous political challenges to its existence. Since 2013, the population has gotten older and the annual cancer incidence is increasing, as is the number of survivors (including a growing number of those living with advanced and metastatic disease). Additionally, lack of access to quality, guideline-concordant care across the United States<sup>112-114</sup> is only becoming more challenging, given the swift pace of evidence generation in cancer care. Moving forward, we must not only aspire to

achieve the Cancer Moonshot, we must also emphasize the Cancer Groundshot, ensuring that all populations have access to proven interventions.<sup>115</sup>

Upstream forces, such as increasing complexity of cancer care, growing specialization and silos in the workforce, reduced reimbursements, shifting political climates (including threats to the ACA and changing leadership in federal organizations), the COVID-19 pandemic, and other challenges, have prevented this system-level transformation. Unlike much of the world, the lack of a single national entity overseeing health care fragments the US health care system and stifles change. Nevertheless, despite these obstacles, we are hopeful that with the National Cancer Plan release and ongoing leadership of NCI, FDA, ASCO, and other cancer organizations, the conversation will continue on how best to address current challenges to providing the highest-quality cancer care to all patients living with and beyond cancer.

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## AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

### Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis: One Decade Later

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Open Payments is a public database containing information reported by companies about payments made to US-licensed physicians ([Open Payments](#)).

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