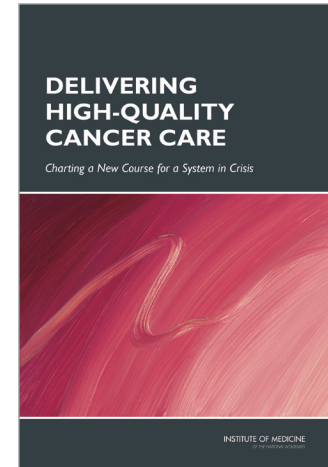


For more information visit www.iom.edu/qualitycancer care

Delivering High-Quality Cancer Care

Charting a New Course for a System in Crisis



In the United States, approximately 14 million people have had cancer and more than 1.6 million new cases are diagnosed each year. However, more than a decade after the Institute of Medicine (IOM) first studied the quality of cancer care, the barriers to achieving excellent care for all cancer patients remain daunting. Therefore, in 2012, the IOM convened a committee of experts to examine the quality of cancer care in the United States and formulate recommendations for improvement. *Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis* presents the committee's findings and recommendations.

A System in Crisis

The committee concludes that the cancer care delivery system is in crisis. Care often is not patient-centered, many patients do not receive palliative care to manage their symptoms and side effects from treatment, and decisions about care often are not based on the latest scientific evidence.

The cost of cancer care also is rising faster than many sectors of medicine—having increased to \$125 billion in 2010 from \$72 billion in 2004—and is projected to reach \$173 billion by 2020. Rising costs are making cancer care less affordable for patients and their families and are creating disparities in patients' access to high-quality cancer care.

There also are growing shortages of health professionals skilled in providing cancer care, and the number of adults age 65 and older—the group most susceptible to cancer—is expected to double by 2030, contributing to a 45 percent increase in the number of people developing cancer. The current care

Care often is not patient-centered, many patients do not receive palliative care to manage their symptoms and side effects from treatment, and decisions about care often are not based on the latest scientific evidence.

delivery system is poorly prepared to address the care needs of this population, which are complex due to altered physiology, functional and cognitive impairment, multiple coexisting diseases, increased side effects from treatment, and greater need for social support.

The committee proposes a conceptual framework for improving the quality of cancer care (see figure). It comprises six interconnected components: (1) engaged patients; (2) an adequately staffed, trained, and coordinated workforce; (3) evidence-based care; (4) learning health care information technology (IT); (5) translation of evidence into clinical practice, quality measurement and performance improvement; and (6) accessible and affordable care.

Engaging Patients, Developing a Coordinated Workforce

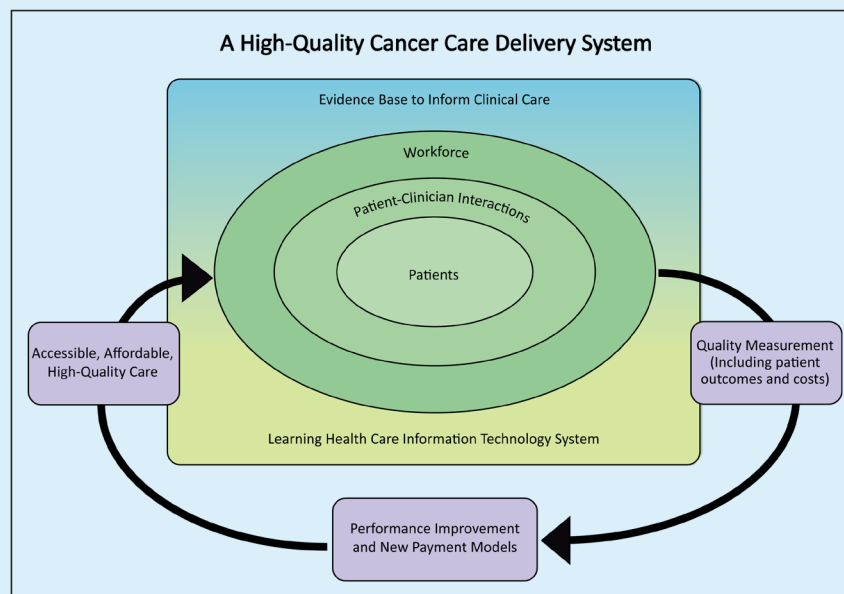
In a high-quality cancer care delivery system, cancer care teams should support all patients in making informed medical decisions by providing patients and their families with understandable information at key decision points on such matters as cancer prognosis, treatment benefits and

harms, palliative care, psychosocial support, and costs of care. To reach this goal, the committee recommends that the federal government work with other stakeholders to improve the development and dissemination of this critical information, using decision aids when possible. And professional educational programs should provide cancer care team members with formal, comprehensive training in communication.

Patients with advanced cancer should receive end-of-life care consistent with their needs, values, and preferences. This will require cancer care teams to revisit and implement patients' advance care plans—which detail the type of care patients would want to receive if they become unable to speak for themselves—and to place a primary emphasis on palliative care, psychosocial support, and timely referral to hospice for end-of-life care.

High-quality cancer care is provided by diverse teams of professionals. The cancer care team, in coordination with primary/geriatrics teams and specialist care teams, should implement patients' care plans and deliver comprehensive, efficient, and patient-centered care. To promote such teams, federal and state legislative and regulatory bodies should eliminate reimbursement and scope-of-practice barriers to

FIGURE: A High-Quality Cancer Care Delivery System



Cancer care teams helping those with advanced cancer should provide patients with end-of-life care consistent with their needs, values, and preferences.

team-based care, and academic institutions and professional societies should develop interprofessional education programs to train the workforce in team-based cancer care.

Moreover, it is critical that cancer care delivery organizations require members of cancer care teams to have the necessary skills to deliver high-quality cancer care, as demonstrated through training, certification, or credentials.

Evidence-Based Care and Improved Information Technology

Clinical research that gathers evidence of the benefits and harms of various treatment options is an essential part of a high-quality cancer care system. Patients, in consultation with their care teams, could use this information to make treatment decisions that are consistent with their needs, values, and preferences. Improving the evidence base will require expanding the breadth and depth of data collected on cancer interventions, including more data on older adults and patients with multiple chronic diseases, as well as more data on patient-reported outcomes, patient characteristics, and health behaviors.

A learning health care IT system would enable real-time analysis of data from cancer patients in a variety of care settings to improve knowledge and inform medical decisions. This IT system would collect and analyze data from clinical practice, implement changes to improve care, evaluate the outcomes of these changes, and generate new hypotheses to test and implement. Many of the elements for a learning health care IT system—

such as electronic health records and cancer registries—already are in place, but these elements often are not implemented or integrated in a way that creates a true learning system. The committee recommends that professional organizations and the Department of Health and Human Services (HHS) develop the necessary components of a learning health care IT system.

Measuring the Quality of Care

In order to continue to advance the high-quality cancer care delivery system, measurement and assessment of progress in improving the delivery of cancer care, public reporting of information gathered, and development of innovative strategies to facilitate performance improvement will be needed. To reach this goal, the committee recommends the development of a national quality reporting program for cancer care. HHS should work with professional societies to create and implement a formal long-term strategy for publicly reporting quality measures for cancer care. They also should prioritize, fund, and direct the development of meaningful quality measures for cancer care with a focus on outcome measures, as well as implement the infrastructure for public reporting.

Accessible and Affordable Care

A high-quality cancer care delivery system should be accessible to all patients, including vulnerable and underserved populations. This system



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should also reward cancer care teams for providing patient-centered, high-quality care and eliminating wasteful interventions.

The committee recommends that HHS develop a national strategy that leverages existing community interventions to provide accessible and affordable cancer care. To accomplish this, HHS should support the development of innovative programs, identify and disseminate effective community interventions, and provide ongoing support to successful community interventions. In addition, payers should design and evaluate new payment models that encourage cancer care teams to provide care that is based on the best available evidence and aligns with their patients' needs, values, and preferences. If evaluations of specific payment models demonstrate increased quality and affordability, payers should rapidly transition from fee-for-service reimbursements to new payment models.

Conclusion

Changes across the board urgently are needed to improve the quality of cancer care. All participants and stakeholders, including cancer care teams, patients and their families, researchers, quality metrics developers, and payers, as well as HHS, other federal agencies, and industry, must reevaluate their current roles and responsibilities in cancer care and work together to develop a higher quality cancer care delivery system. By working toward this shared goal, the cancer care community can improve the quality of life and outcomes for people facing a cancer diagnosis. 

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