IOM responds to cancer care crisis

THE US cancer care delivery system is in crisis and changes across the board are urgently needed to improve the quality of cancer care, concludes the Institute of Medicine (IOM) of the National Academies in its new report, Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis.

Sponsored by the National Cancer Institute (NCI), the Centers for Disease Control and Prevention (CDC), the American Cancer Society (ACS), and several other organizations, the IOM report committee sets forth a conceptual framework for improving the quality of cancer care based on the main problems being faced by the system. For example, the report puts the projected costs of cancer care at $173 billion by 2020; coupled with a growing elderly population that is vulnerable to cancer and a shortage of oncology health professionals, the current care delivery system is poorly prepared to address cancer care needs, the authors contend.

The IOM report presents six components of high-quality cancer care that need to be addressed, in order of priority level. Detailed explanations of each are available in the report as well as in the report brief:

- **Engaged patients** Cancer care teams should provide comprehensible information to these patients and their families on such matters as cancer prognosis, treatment benefits and harms, and palliative care.
- **An adequately staffed, trained, and coordinated work force** The cancer care work force must include enough clinicians with essential core competencies for treating patients with cancer. The cancer care team should work with primary care/geriatrics and specialist teams to implement patient care plans and deliver comprehensive, efficient, and patient-centered care.
- **Evidence-based care** Clinical research should gather evidence of the benefits and harms of various treatment options and of the impact that treatment regimens have on symptoms, quality of life, and patients’ overall experience with the cancer.
- **A learning health care information technology (IT)** Cancer care requires an IT system that can “learn” by enabling real-time analysis of patient data in various settings to improve knowledge and inform medical decisions.
- **Translation of evidence into clinical practice, quality measurement, and performance improvement** Clinicians should be given tools that allow them to incorporate new medical knowledge into routine care quickly.
- **Accessible and affordable care** HHS should develop a national strategy that leverages existing community interventions to provide accessible and affordable cancer care, as major disparities currently exist in access to such care. Professional societies should publicize evidence-based information about cancer care practices that are unnecessary or that carry more harms than benefits. If specific payment models demonstrate increased quality and affordability, payers should quickly adopt those models.

The report calls upon all participants and stakeholders in cancer care to reevaluate their roles and to work together to improve the cancer care delivery system.
Swallowing exercises help keep throat open

PERSONS WITH head and neck cancer who are undergoing radiation or chemoradiation can preserve swallowing function by exercising involved muscles before, during, and after treatment.

Patients receiving radiation or chemoradiation for head and neck cancer do not always retain their ability to swallow normally, even when related tissue and structure are preserved. Dysphagia is one of the most common side effects of radiation and chemoradiation, and one of the main predictors of posttreatment quality of life, according to a statement issued by the University of California–Los Angeles (UCLA) in Los Angeles, California.

A group led by UCLA Jonsson Comprehensive Cancer Center’s Marilene B. Wang, MD, evaluated a swallow preservation protocol (SPP) in which patients received swallow therapy before, during, and after radiation treatment for head and neck cancer. The exercises were designed to maintain the range of motion of mouth and neck muscles involved in swallowing and to counter the radiation-induced formation of excess tissue that interferes with swallowing.

As Wang and colleagues explained in Otolaryngology—Head and Neck Surgery, each patient’s diet was recorded at each SPP visit as regular (chewable), puree, liquid, or gastrostomy tube. A total of 57 patients were adherent and 28 were nonadherent during treatment. More patients in the adherent group were able to tolerate a regular diet (54.4%, compared with 21.4% in the nonadherent group) and were less dependent on gastrostomy tubes (22.8% vs 53.6%). The adherent group also had a higher rate of maintaining or improving diet (54.4%, compared with 25% for the nonadherent group).

Existing treatment may stop tamoxifen-induced fog

RESEARCHERS have not only confirmed that tamoxifen induces cognitive dysfunction in users, they have also found an existing treatment that can prevent this adverse effect.

Widely used to combat breast cancer, tamoxifen is regarded as a benign antihormonal agent. However, clinical studies indicate that exposure to this drug is associated with adverse neurologic consequences, wrote Mark Noble, PhD, director of the University of Rochester Stem Cell and Regenerative Medicine Institute in Rochester, New York, and fellow investigators in The Journal of Neuroscience (2013;33[38]:15069-15074).

Noble and team uncovered a scientific basis for what many women report anecdotally regarding tamoxifen’s toxicity to brain cells: Their laboratory and mouse studies revealed that the drug is toxic for a variety of central nervous system (CNS) cell populations and that it increases cell death and reduces cell division in areas of the brain.

Following this discovery, Noble and colleagues screened 1,040 compounds already in clinical use or in clinical trials, eventually identifying 27 that protected essential CNS cells known as 0-2A/OPCs from tamoxifen toxicity. Further testing singled out the investigational MEK inhibitor AZD6244 as a potential therapy against the effects of tamoxifen. As noted in a statement from the University of Rochester Medical Center, AZD6244, which is also known as selumetinib, is being evaluated in several national clinical trials as a treatment for various cancers, including breast cancer.

Noble’s group showed that AZD6244 prevented tamoxifen-induced destruction of brain cells in mice while enhancing tamoxifen’s effects on breast cancer cells. In future work, the researchers plan to identify the dosage of AZD6244 that provides maximum protection and minimum disruption to differentiating brain cells.
Early mammography supported

NEW FINDINGS that run counter to federal recommendations indicate that women should be encouraged to initiate regular mammographic screening before age 50 years.

Blake Cady, MD, professor of surgery (emeritus) at Harvard Medical School in Boston, Massachusetts, and colleagues explained in the journal Cancer that individual trials and meta-analyses demonstrate varying rates of mortality reduction from mammographic screening, leading to questions about the value of such testing and whether treatment advances have diminished the importance of early detection.

To explore their hypothesis that most deaths from breast cancer occurred in unscreened women, the investigators used a technique known as failure analysis, which looks backward from death to identify correlations at diagnosis.

Cady’s group gathered data from diagnoses of invasive breast cancers made between 1990 and 1999 and followed through 2007. Invasive breast cancer failure analysis defined 7,301 patients between 1990 and 1999, with 609 documented deaths from breast cancer and 905 deaths from other causes. The majority of breast cancer deaths (71%) occurred among unscreened women.

Median age at diagnosis was 49 years for fatal cancers and 72 years for deaths not from breast cancer. Half (50%) of all breast cancer deaths occurred in women younger than 50 years, with 13% occurring in women 70 years and older.

The uses for Abraxane for Injectable Suspension (paclitaxel protein-bound particles for injectable suspension, albumin-bound) were expanded by the FDA to include the treatment of persons with metastatic adenocarcinoma of the pancreas, in combination with gemcitabine (Gemzar, generics).

The FDA approved Treanda Injection (bendamustine HCl), a new formulation of Treanda for Injection. The new liquid formulation removes the step of reconstituting lyophilized powder with sterile water before adding the medicine to the diluent and administering it to the patient.

The first generic version of capecitabine (Xeloda) received FDA approval. Teva Pharmaceuticals USA will be permitted to market the oral chemotherapy pill in 150-mg and 500-mg strengths.

The FDA announced class-wide safety labeling changes and new postmarket study requirements for all ER/LA opioid analgesics intended to treat pain. The updated indication states that these agents are indicated for the management of pain severe enough to require daily, 24-hour, long-term opioid treatment, and for which alternative treatment options are ineffective or not tolerated.