The magnitude of pain in the United States is astounding. More than 116 million Americans have pain that persists for weeks to years. The total financial costs of this epidemic are $560 billion to $635 billion per year, according to *Relieving Pain in America*, the recent report of an Institute of Medicine (IOM) committee that we cochaired. And these figures don't include pain in children or people in long-term care facilities, the military, or prison. The annual U.S. expenditures related to pain (including direct medical costs and lost wages) are higher than those for cancer, heart disease, and diabetes combined. They include nearly $100 billion annually from state and federal budgets. Yet the treatment covered by these expenditures doesn't fully alleviate Americans' pain. Indeed, our committee reviewed the scientific and clinical evidence, held public workshops, received testimony from more than 2000 Americans, commissioned a review on pain's economic burden, and concluded that relieving acute and chronic pain is a significant overlooked problem in the United States.

Major impediments to relief include patients' limited access to clinicians who are knowledgeable about acute and chronic pain — owing in part to the prevalence of outmoded or unscientific knowledge and attitudes about pain. Fundamental differences in views about pain and its management pervade the medical profession. Some physicians over-prescribe medications including opioids, while others refuse to prescribe them at all for fear of violating local or state regulations. More than 65% of nursing home residents report having inadequately treated pain, which suggests that the impact of ineffective pain management could increase dramatically as the population ages. Decisions about medical care are also influenced by insurance coverage that may be preferential for injections, infusions, procedures, and surgery over the physical therapy, rehabilitation, or other more comprehensive approaches to pain control that may benefit patients more. Physicians' referral of patients to other health care professionals, including nurses, chiropractors, and practitioners of complementary medicine, and patients' willingness to seek such care, can be influenced by bias, unclear data, and the availability of care. Sadly, many people with chronic pain see physicians as "poor listeners."

Differences in expectations and outcomes related to genetic make-up, age, race, and sex, as well as social and cultural mores, influence people's approach to pain relief. Many people with chronic pain simply don't know where to go for help, and when they do seek help, they may become frustrated, disappointed, or angry be-
Effective pain management is a moral imperative, a professional responsibility, and the duty of people in the healing professions. Chronic pain has a distinct pathologic basis, causing changes throughout the nervous system that often worsen over time. It has significant psychological and cognitive correlates and can constitute a serious, separate disease entity. Pain results from a combination of biologic, psychological, and social factors and often requires comprehensive approaches to prevention and management. Given chronic pain’s diverse effects, interdisciplinary assessment and treatment may produce the best results for people with the most severe and persistent pain problems. Chronic pain has such severe effects on all aspects of a person’s life that every effort should be made to achieve both primary prevention (e.g., surgery) and secondary prevention (of the transition from the acute to the chronic state) through early intervention. Although there is much more to be learned about pain and its treatment, even existing knowledge is not always used effectively, and thus substantial numbers of people suffer unnecessarily.

The committee recognizes the serious problem of diversion and abuse of opioid drugs and questions about their long-term usefulness; it believes, however, that when opioids are used as prescribed and are appropriately monitored, they can be safe and effective, especially for acute, postoperative pain, procedural pain, and patients near the end of life who desire more pain relief.

The effectiveness of pain treatments depends greatly on the strength of the clinician–patient relationship; pain treatment is never about the clinician’s intervention alone, but about the clinician and the patient (and family) working together.

Many features of the problem of pain demand public health approaches — the large numbers of people affected, disparities in occurrence and treatment, and the goals of prevention. Public education can counter myths, stereotypes, and stigma that hinder better care.

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ciencies do not appear to be alleviated during residency or practice.

Given the prevalence of chronic pain, it is not realistic or desirable to relegate pain management to pain specialists alone. There are fewer than 4000 such specialists in the country, with limited geographic coverage. Ideally primary care physicians would coordinate pain management, but such a change cannot be achieved without significant improvements in education and training. Moreover, payment systems must be restructured to allow primary care physicians to spend more time with patients with chronic pain and deliver care more effectively. Given the increasing demands on primary care physicians, it would be unfair to add expectations without providing opportunities for education and payment for counseling patients. Similar issues and constraints apply to nurses, psychologists, physical and occupational therapists, pharmacists, and practitioners of complementary and alternative medicine.

The IOM committee report offers 16 recommendations,1 provides a timeline for implementing them, and designates the groups responsible for doing so. Three recommendations address education as central to the necessary cultural transformation. Specifically, we recommended expanding and redesigning education programs to transform the understanding of pain, improving education for clinicians, and increasing the number of health professionals with advanced expertise in pain care.

These recommendations serve the goal of creating a comprehensive, population-level strategy for pain prevention, treatment, management, and research. The scope of the problems in pain management is daunting, and the limitations in the knowledge and education of health care professionals are glaring. But the medical community must actively engage in the necessary cultural transformation to reduce the pain and suffering of Americans.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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Painful Inequities — Palliative Care in Developing Countries

Daniela Lamas, M.D., and Lisa Rosenbaum, M.D.

When Artur, a former KGB agent in Ukraine, developed prostate cancer that metastasized to his bones, his pain grew so intense that he moved hours away from his family so they would not witness his suffering. “I don’t want them to see me cry,” he said. Lacking access to the opioid regimens that we in the United States depend on to treat the pain accompanying end-stage prostate cancer, Artur turned to what he had available: a bottle of liquor and a gun beneath his pillow.

For 27-year-old Vlad, the temptation to take his own life was irresistible. Unable to stand the pain from his metastatic brain cancer, Vlad tried to throw himself out a window. He survived, only to live 2 more years with intractable pain.1

While the global burden of cancer and other noncommunicable diseases grows, lack of funding remains an impediment to the dissemination of effective treatment. But whereas patients like Artur and Vlad might be unable to gain access to high-quality cancer care, opioids are easy to produce and cheap. Morphine, the World Health Organization–sanctioned first-line treatment for severe pain, costs pennies per dose to manufacture. Yet 80% of the world’s population, including more than 5 million patients with terminal cancer, lacks adequate access to pain treatment. In more than 150 countries, morphine is simply not available.2

“There isn’t a single government that couldn’t procure morphine if they wanted it,” says Meg O’Brien, who directs the Global Access to Pain Relief Initiative (GAPRI, a program of the Union for International Cancer Control and the American Cancer Society). “But no one is demanding it.”

Physicians’ perceptions about palliation are at the root of the problem. Many physicians seem to believe that to discuss pain control is to admit defeat. This barrier is not unique to resource-poor countries. Even in the United States, whose palliative care movement has been under way for decades, many physicians were surprised when researchers showed that treating pain does not hasten death but, rather, prolongs survival.3

In many countries, physicians learn only about opiates’ side effects, not their potential benefits,