mentary, or Medigap, insurance policies to cover deductibles, co-payments, and uncovered services.

Medicare is administered at the federal level by the Centers for Medicare and Medicaid Services. The Medicare program’s passage followed a decades-long attempt to enact national health insurance for all Americans. Medicare proponents hoped and expected that the program would be a first step toward that end; as of 2007, Medicare for all remained just one of many proposals for health-care reform.

Among other strengths, Medicare has substantially lower administrative costs than private insurers and has instituted innovative payment systems in the form of diagnosis related groups (DRGs) for hospitals and the resource-based relative value scale (RBRVS) for physicians. Under DRGs, hospitals are paid on a prospective basis to encourage efficiency. The RBRVS makes it possible to redress payment imbalances between generalist and specialist physicians.

SEE ALSO Medicaid; Welfare; Welfare State

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MEDICINE

In its broadest sense, medicine denotes ideas relating to diagnoses, causes, and cures of illness, as well as the practice of restoring and maintaining health, and the substances used in the treatment of disease. Medicine is both a domain of knowledge and the application of that knowledge. Medical ideas and practices as well as the social institutions relating to health compose a medical system. Medical systems include ways of classifying disease (cancer, a cold, soul loss, and spirit possession), health specialists (doctors, herbalists, and shamans), and therapies to end illness (pharmaceuticals, meditation, acupuncture, and divination).

Western medicine, or biomedicine, is currently the most widespread medical system, but thousands of others exist throughout the world. Although each tradition is different, diagnosis and treatment often consist of both mag-

ical and herbal components. For instance, many societies believe that illness can be attributed to supernatural forces, which can be meted out by spirits, gods, ancestors, sorcerers, or witches. These forces are capable of causing both the body and the soul to become ill. To combat disease, patients and healers can also invoke magical substances, rituals, or supernatural beings. Another common method of healing is herbalism, using plants to treat illness. An immense variety of plant species are employed as remedies and include decongestants, pain relievers, and antiseptics. Plants in the Americas have been used to derive important drugs including aspirin, quinine, and novocaine. Although nonbiomedical traditions were once regarded as ineffective and superstitious, they are now acknowledged as providing new sources of medicinal plants as well as information regarding the social lives, environments, and experiences of humans.

Medical ideas and practices both constitute and are constituted by social and cultural beliefs and concerns. Arthur Kleinman notes that medicine is a cultural system “of symbolic meanings anchored in particular arrangements of social institutions and patterns of interpersonal interactions” (1990, p. 24). Illness dialogues, diagnoses, and treatments can express ideas regarding religion, morality, power, politics, identity, economics, and gender. Consequently, social scientists are able to examine medical systems and their components as one method of understanding societal norms, attitudes, and practices. For instance, in The Birth of the Clinic (1973) Michel Foucault examines what he calls the “clinical gaze,” to show how medicine is linked to power. In AIDS and Accusation (1992) Paul Farmer explores how AIDS dialogues in the United States and Haiti reflect attitudes of colonialism, capitalism, and poverty. Social science research regarding the conceptions and use of medicine can focus on both local environments and global ones.

HISTORY OF MEDICINE

The purposeful treatment of illness has probably occurred throughout the entire span of human existence. However, without written records, it is impossible to know for certain what the earliest types of medical treatment were. The first written evidence of medical knowledge, including lists of symptoms, diagnoses, and treatments, comes from Mesopotamia and Egypt, dating to more than four thousand years ago. In ancient Mesopotamia 250 vegetable and 120 mineral drugs were documented (Magner 1992, p. 19). But it is ancient Egypt that can claim both the first real physician known by name, Imhotep (c. 2980 BCE), and later, the first formalized medical system, which included medical schools, medical insurance, sick leave, and registered physicians of both sexes. The ancient Mesopotamian and the Egyptian medical systems also
incorporated magical remedies. These were the first of a number of codified medical traditions that developed around the world.

The ancient medical systems of India and China were developed later than those of Mesopotamia and Egypt but they are still practiced today. In India, Ayurveda (the science of life) was intended to maintain health, not simply treat disease. Ayurvedic practitioners believe that health is the result of the balance of three doshas (elemental manifestations in the physical body) that govern body processes. Magner notes that ancient texts list more than one thousand diseases and almost one thousand drugs, and describe advanced surgical procedures including cesarean section, amputation, lithotomy, cauterization, tonsillectomy, and plastic surgery (p. 43). Like Ayurveda, traditional Chinese medicine also views disease as the result of an imbalance in the body, which is composed of yin and yang elements. Doctors often made diagnoses by studying the pulses of patients and were aware that the heart was responsible for circulating blood long before Europeans were. Chinese medicine employs a variety of treatments including more than five thousand medicinal herbs (such as ginseng), acupuncture (inserting needles into the body at specific points), and moxibustion (applying a burning tinder to the skin).

In classical Greece, Hippocrates (460–361 BCE), sometimes called the “Father of Medicine,” wrote that health was the result of a balance between the four humor (basic bodily fluids) of phlegm, yellow bile, black bile, and blood. During the Roman Empire, the humoral approach was used by many physicians, including Galen (130–200 CE). His writings were used as important medical texts throughout Rome, the Islamic world, and Europe for centuries. Islamic doctors further embraced and modified the Greek tradition and spread it from Spain to India. The medical writings of the doctor and philosopher Ibn Sina (Avicenna, 980–1037) became standard texts throughout the Arab conquests and Medieval Europe. In Europe it was not until the scientific revolution of the sixteenth and seventeenth centuries that the Greco-Islamic tradition was fully abandoned.

In 1628 William Harvey (1578–1657) challenged the Galenic tradition when he published what was then an unorthodox idea: that the pumping heart moved a continuous flow of blood through the body. Almost one hundred years later the Turkish and African practice of purposefully exposing individuals to mild strains of smallpox to achieve inoculation caught the attention of Europeans and Americans, leading to the development of the first vaccine. Nonetheless, it was not until the nineteenth century that advances in chemistry and medical technology led to the discovery of microbial sources of disease and their cures. This allowed researchers to isolate, treat, and create vaccines for diseases such as tuberculosis, tetanus, cholera, and rabies. The introduction of general anesthesia (1840s) and antisepsis (1870s) precipitated the growth of surgery and hospitals, but it was not until the twentieth century that significant advances were made.

MEDICINE TODAY

The product of a specific historic and cultural past, biomedicine is currently used around the globe. The biomedical system includes professional, scientific, educational, legal, financial, and ethical frameworks. Biomedicine can be characterized by a number of features. One is its almost exclusive use of science and technology to fight disease. Unlike many other traditions, biomedicine views disease as caused by only natural factors. Supernatural or magical sources of illness or treatments are absent. Most biomedical treatments involve the use of synthesized pharmaceuticals and some require hospitalization. Furthermore, the physical body, not the soul, is considered to be the only focus of illness. Given its early history, biomedical practitioners often have a tendency to look for and find a single cause of an illness (such as a microbe) and then to treat it with a single cure (such as antibiotics). Deborah Gordon (1988) notes that the scientific approach of biomedicine is not only a way to treat illness; it is also a way of conceptualizing the world.

The focus of biomedicine is illness and not health, which is often defined as the absence of disease. Critics charge that because biomedicine almost exclusively treats the body and disease, it lacks a holistic approach to well-being that engages with the social individual. Patients who feel that biomedicine is not meeting their needs have a number of other therapeutic options from which to choose. In developed countries such as the United States, complementary and alternative medicines are widely used. In 1998 Eisenberg et al. estimated that number of visits to alternative medicine practitioners exceeded the total number of consultations with primary care physicians in the United States. These therapies, which include herbalism, meditation, yoga, massage, acupuncture, aromatherapy, and chiropractic medicine, are used either in conjunction with, or as a substitute for, biomedical treatment. They are often provided by nonlicensed healers and can incorporate religious or non-Western traditions.

Throughout much of the world, the majority of medical consultations are still with traditional healers and not biomedical personnel. Nevertheless, indigenous and local healing traditions are often used in conjunction with biomedicine. For instance, in India and China, Ayurveda and traditional Chinese medicine, respectively, continue to play important roles in the public health care systems alongside biomedicine. Magner notes that in the 1960s acupuncture anesthesia was used in 60 percent of all sur-
geries in China (1992, p. 59). Australian Aboriginal people have the choice of going to a biomedical clinic, using local plants as remedies, or consulting local healers to cure spiritual sickness. In Africa herbalists and diviners, as well as doctors and nurses, are regularly consulted. Throughout our history, humans have employed a variety of techniques to treat illness, and this process continues today.

SEE ALSO AIDS; AIDS/HIV in Developing Countries, Impact of; Anthropology, Medical; Disease; Magic; Medicaid; Medicare; Medicine; Socialized; Public Health

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MEDICINE, SOCIALIZED

The American Heritage Dictionary (4th ed., 2001) defines socialized medicine as "a system for providing medical and hospital care for all at a nominal cost by means of government regulation." This leaves room for considerable craftsmanship in the construction of socialist systems. Indeed existing socialized medical systems in, for example, Great Britain, Cuba, Finland, and Switzerland conform to this definition, but are far from monolithic.

Because every aspect of a socialized health care industry is controlled and provided by the government—most doctors, nurses, medics, and administrators are government employees—the system, such as the National Health Service (NHS) in Britain, determines where, when, and how services are provided. Of course citizens may seek care outside the system, in the private sector.

Socialized medical systems are designed to eliminate the insurance industry and marginalize profit while providing health care for all. According to many recent studies, socialized systems outperform free-market profit-driven systems in terms of availability, quality, and cost of care. In addition a report from the Johns Hopkins University Bloomberg School of Public Health stated that the United Kingdom's socialized medical system outperforms the U.S. system in patient-reported perceptions (Blendon, Schoen, DesRoches, et al. 2003). In other words, the people with direct experiences report greater satisfaction with their health services under a socialized system than they do in a free-market system. These results must be considered along with the fact that the U.S. per capita health care expenditures ($4,887) are nearly triple those in the United Kingdom ($1,992). In the year 2000 the United States spent 44 percent more on health care than Switzerland, the nation with the next highest per capita health care costs. Nevertheless, Americans had fewer physician visits, and hospital stays were shorter compared with those in most other industrialized nations. The study suggests that the difference in spending is caused mostly by higher prices for health care goods and services in the United States.

The British system is probably the most instructive example for Americans to evaluate because of the similarities in economy and government structure between the two nations. According to the NHS Web site, the system “was set up on the 5th July 1948 to provide healthcare for all citizens, based on need, not the ability to pay” (National Health Service 2007). Originally conceived as a response to the massive casualties of World War II (1939–1945), the system survives and continues to evolve in the early twenty-first century. The NHS is funded by taxpayers and managed by the Department of Health, which sets overall policy on health issues. Individual patients are assigned a primary care center (with doctors, dentists, optician, pharmacist, and a walk-in center) managed by a primary care trust (PCT). The NHS explains its system of referrals this way: "If a health problem cannot be sorted out through primary care, or there is an emergency, the next stop is hospital. If you need hospital treatment, a general practitioner will normally arrange it for you" (National Health Service 2007).

The PCTs are responsible for planning secondary care. They look at the health needs of the local community and develop plans to set priorities locally. They then decide which secondary care services to commission to meet people's needs and work closely with the providers of the secondary care services to agree about delivering those services.

The NHS may be the world's most sophisticated socialized medical system, but the modern world's first