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**PART II - SUMMARY OF COMPLETED PROJECT**  
Educational Broadcasting Corporation (Thirteen/WNET)  
National Science Foundation Grant #8850603

**MEDICINE AT THE CROSSROADS** (a.k.a. The Future of Medicine) is an 8-part series of one-hour documentaries which examines the scientific and social forces that have shaped the practice of medicine around the world. The series was developed and produced over a five-year period and in eleven countries.

Among the major issues examined in the series are the education of medical practitioners and the communication of medical issues. The series also considers the dilemmas of modern medicine, including the treatment of the elderly and the dying, the myth of the quick fix in the face of chronic and incurable diseases such as HIV, and the far-reaching implications of genetic treatments. Finally, the series examines the global progress made in medical research and application, as well as the questions remaining to be answered. These include not only scientific treatment, but accessibility and other critical topics affecting the overall success of medical advances.

**MEDICINE AT THE CROSSROADS** is a co-production of Thirteen/WNET and BBC-TV in association with Television Española SA (RTVE) and the Australian Broadcasting Corporation. Stefan Moore of Thirteen/WNET and Martin Freeth of BBC-TV are series producers. George Page is executive in charge of **MEDICINE AT THE CROSSROADS**. A list of scholarly advisors and a program synopsis is attached.

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**PART III - TECHNICAL INFORMATION**  
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**Ratings**

**MEDICINE AT THE CROSSROADS** was broadcast by PBS over four weeks, in two-hour installments, beginning Monday, April 5, 1993, at 9:00 p.m. Each week, the series was carried by 87 percent of public television stations, reaching an average of 288 stations, and 96 percent of all television households throughout the United States. The series was seen by over 17.3 million viewers nationwide. Each episode drew an average rating of 2.1, or 2.5 million viewers from some 2 million households. In addition, the series recieved the prestigious *Freddy* Award, sponsored by the International Health and Medical Film Festival, for its overall excellence.

**Educational Outreach**

Corresponding to the broadcast of **MEDICINE AT THE CROSSROADS**, Thirteen launched an educational outreach effort which include the publication of 12,000 viewers' guides distributed to constituencies and interest groups dealing with issues of medical practice and serving policy makers legislators, and community leaders. The 8-page guides were also distributed to academic institutions, academic faculty members, and such organizations as the American Hospital Association Task Force for Health Care Education and Training, the American Student Association Humanistic Task Force, the Society for Public Health Education, the American Association of Retired Persons' Health Advocacy Volunteers, and many more.

*Medicine at the Crossroads*, a companion trade book to the series, written by Melvin Konner, M.D., and published by Pantheon Books, was distributed to book stores across the country.

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## PROGRAM SYNOPSES

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*Program I: Temple of Science* examines teaching hospitals as the evolutionary focal point of modern medicine. The program was filmed at Johns Hopkins University, one of the world's leading teaching hospitals. Most agree that the teaching hospital is critical to the proper development of young doctors. But critics claim it can also limit doctor training to a narrow spectrum of serious illness, thereby providing a distorted picture of medical needs. Yet, within a remarkably short period, hospitals have evolved from places of dread and hopelessness to citadels of scientific research, education and extraordinary life-saving technology. The program also examines why, despite these advances, the role of many hospitals is in turmoil today.

*Program II: Code of Silence* looks at the barrier separating patients from their doctors who often cloak themselves in a code of silence. Dramatic comparisons are made between Japan, where silence is the rule, and the United States, where openness and informed consent are the standard practice. The code is a distant echo from the days of Hippocrates, the father of medicine. Hippocrates said doctors should keep their medical mysteries to themselves and rely on the patients' own faith in their power to heal. This statement is the basis for the well-known placebo effect, which was, years ago, often the most doctors were able to provide. But a new wave of medical technologies has narrowed the gap between doctor and patient, undermining many patients' faith, as well as doctors' supremacy. According to some, this development has diminished the physician's power to heal.

*Program III: Life Support* examines the dilemma of modern medicine as it relates to aging and death. It takes a close look at how widely the treatments vary in the United States, Ireland and India. The program reports on a wide range of critical issues related to the explosive growth in the number of dependent elderly, whose demand for desperately needed services will mushroom. In the year 2050, an estimated one million Americans will have logged a century of life - and nearly half of them with Alzheimer's disease. The program illustrates how basic research into brain structure and function is shedding light on this enigmatic disease. It also looks at the artificial means of extending life and considers the implications of having the largest proportion of the country's medical expenditure devoted to the last few months of life.

*Program IV: Conceiving the Future* exemplifies how basic science has spawned concurrent revolutions in molecular biology and medical science. Inherent in the basic scientific discoveries in human genetics are medical applications having profound social implications. For example, the program reports on the medical establishment's growing ability to orchestrate conception, treat the fetus in the mother's womb, and sustain even the weakest infants with elaborate life-support equipment. The documentary considers the impact these treatments have on the individual and society, and the ethical issues

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associated with such practices. For many, medical intervention in the process of conception and birth has raised serious questions about the role of medicine.

*Program V: Random Cuts* reports on the interplay of scientific, cultural and economic factors in the use of surgical procedures. It compares different approaches to the treatment of heart disease in Germany, the U.S., and England. The program reports that, according to some studies, 80 percent of all surgical procedures are not scientifically tested; according to other studies, nearly half of all pacemakers, 40 percent of the balloon angioplasty procedures, and two-thirds of all operations to bypass arteries to the brain are unjustified or unnecessary. The program also explores whether proper technology assessment could reduce random surgical procedures.

*Program VI: The Magic Bullet* compares the quick-fix dream with the reality that most disease is chronic and incurable. In considering the rapid development of drugs with significant potential, it considers basic biochemical research and its evolution into the germ theory, as well as the development of antibiotics and their impact on human life. The program follows the research of Nobel Prize winner Emil Beaulieu and his investigations into the chemical structure of hormones. It also traces the evolution of RU486, also known as the abortion pill, from the basic biochemical discovery to its medical application, and its social implications. Ironically, RU486 also appears to have therapeutic value as an anti-carcinogen. These and many other advances over the decades have fostered a widespread expectation that quick-fixes for all diseases, including cancer and AIDS, are just around the corner. Critics contend that this diverts attention and limited resources from other methods of treatment (such as hospice care for the terminally ill) and has led to the overuse and abuse of drugs.

*Program VII: Pandemic* reports that science and hospitals alone can no longer solve the world's health problems — as evidenced by the AIDS pandemic. Miami scientist Nancy Klimas talks about the fundamental research she is conducting in the area of HIV and CD8 cells, and speaks of the need to continue the kind of support for basic science that makes this work possible. The program also goes to Thailand, where treatment is out of reach for most people, but where doctors have learned to assess the cultural and economic roots of disease. In Australia, the program reports on a radically new kind of medicine being practiced by doctors who are confronting the origins of disease.

*Program VIII: Disorderd States* looks at basic research in neuroscience by exploring the care of the mentally ill. Some of this research may lead scientists to a biological understanding of such complex diseases as schizophrenia. It reveals the explosion of new knowledge in the neurosciences that has led to a better understanding of the causes of mental illness and improvements in drug therapy for the mentally ill. Yet, this new information has not yet produced adequate answers regarding the long-term care of people with mental illness. *Disordered States* reviews how new and sometimes unorthodox approaches for long-term care are developed and implemented.