

THE BOWEN RESEARCH CENTER
VITAL ANSWERS

"The research to know why and how to prevent harmful behavior would be as great a boon to society as vaccines and cures for specific diseases."

Otis R. Bowen, M.D.



The problem created by the outstanding success of the medical profession — making people live longer — is how to provide adequate care for all and especially for the millions of people of retirement age. Care that is easy to access, care that is top quality, and care that is affordable.

Otis R. Bowen, physician, legislator, educator

We have to think about how America gets healthier. We like to believe it's by building more hospitals and by educating more physicians. But, since 1965, there are no epidemiological, demographic, nor actuarial measures to show the American population to be any healthier.

Glenn W. Irwin, Jr., M.D., chancellor emeritus, Indiana University-Purdue University at Indianapolis

Real-world answers for a healthier America.



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How can we live healthier, not just longer, lives? How can we keep our medical costs under control? Why is such a large part of our health-care dollar spent on diseases that we know are preventable?

The Bowen Research Center at the Indiana University School of Medicine is named for the man who spent his life searching for solutions to questions such as these. Dedicated to solving problems, it is the first research organization of its kind. Concentrating on prevention rather than new treatments. Helping all citizens of Indiana and those throughout the nation receive adequate, timely medical attention. And finding ways to reduce the ever-increasing cost of staying well.

The Bowen Research Center will provide the vital answers.



When Otis Bowen was governor, it was a time of prosperity in Indiana, an era of good feeling with optimism and confidence in the future.

Thomas M. Miller, *chairman and chief executive officer, INB Financial Corporation*

During his public life, Dr. Bowen frequently described his role in physician's terms: Listening to the problems, evaluating the symptoms to get at their meaning, and then prescribing a remedy.

William J. Watt, *biographer*

Because of his imagination and foresight — and his ability to find the right solutions — Dr. Bowen made outstanding contributions while in Washington, both in health-care measures and in health-care economics.

Richard G. Lugar, *United States Senator*

Otis Bowen has made a difference in your life.



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A country doctor in Bremen, Indiana, population 3,565. One of the most beloved governors in the history of the state. The head of the agency with the largest budget in the federal government, surpassing even that of the Defense Department. Professor emeritus at the Indiana University School of Medicine. Dr. Otis R. Bowen has made life better for us all. Whether it was enacting landmark property tax legislation that has given Indiana business the impetus to flourish as it has or proposing catastrophic health care to give older Americans peace of mind. Putting a cap on malpractice to ensure available and affordable care for all or making house calls up until his inauguration as governor. That kind of dedication is the foundation of the Bowen Research Center.



Government can't solve all our health-care problems related to "lifestyle" diseases alone — especially prevention. Throwing massive amounts of money at the problems isn't the answer either. The causes have their roots in values and mores and therefore we need research, not on treatments, but on how we can change attitudes and behaviors.

Otis R. Bowen, M.D.

Every business executive knows, particularly when competing in international markets, that the specter of 20 to 30 percent increases in health-care premiums has made employee fringe benefits, and especially health-care benefits, the fastest growing expense in American business.

Carl J. Schramm, Ph.D., J.D., president, Health Insurance Association of America

The Bowen Research Center: Common-sense solutions.



The work of the Bowen Center will be cost-effective, practical knowledge. Part of the Indiana University School of Medicine in the Department of Family Medicine

The work of the Bowen Center will be cost-effective, practical knowledge. Part of the Indiana University School of Medicine in the Department of Family Medicine and in collaboration with the School of Public and Environmental Affairs, it will have an immediate impact on the health of our nation — both physical and economic.

It will be multidisciplinary with M.D.s and Ph.D.s from many different areas working together to provide answers to some of the most troublesome health issues of our time. And its focus will be prevention. Prevention of disease through behavioral change, through making sure there is adequate, available care in both rural and urban areas, and through providing the very best care possible in a cost-effective manner.



Changing habits that lead to poor health would generate remarkable improvements in disease prevention. The impact on our economy would be immediate and far reaching.

James K. Baker, chairman and chief executive officer, Arvin Industries and chairman, United States Chamber of Commerce

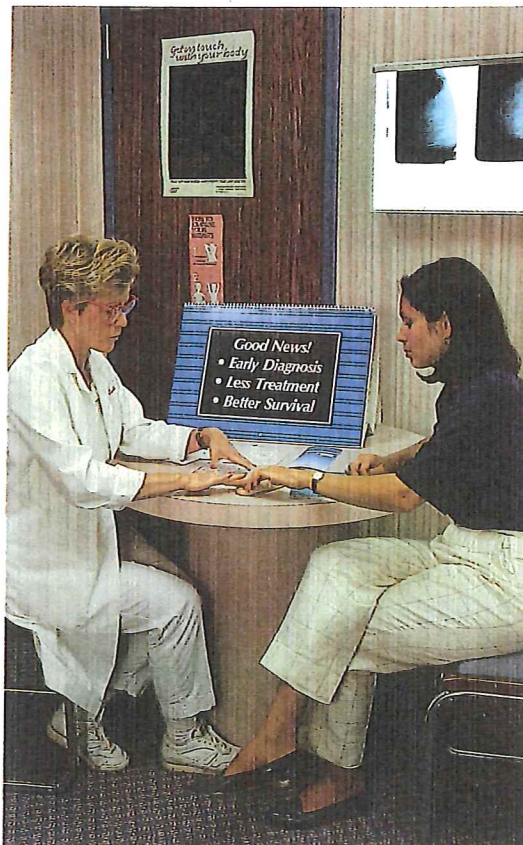
Primary-care physicians, because they're the first to see the patient, are our best defense against preventable disease and therefore against rising costs. By focusing on primary care, the Bowen Center will be where the nation looks for answers.

Deborah I. Allen, M.D., chairman, Department of Family Medicine, Indiana University School of Medicine

As the expense of medicine mounts, employers and consumers are more concerned than ever about value. That's particularly true for those of us in the insurance industry as we look for ways of delivering quality care at a reasonable cost.

Jerry D. Semler, president, American United Life Insurance Company

Reducing the ever-increasing cost of staying well.



The mission of the Bowen Research Center is threefold. First, to discover why people continue to behave in ways that result in premature loss of life and disability.

The mission of the Bowen Research Center is threefold. First, to discover why people continue to behave in ways that result in untimely loss of life and diminished quality of life. To find what will make people quit smoking, keep unmarried teenagers from getting pregnant, and stop drug and alcohol abuse — all preventable problems that cost us nearly \$300 billion a year. Second, to help prevent those “lifestyle” diseases by ensuring Indiana and the nation will have the doctors they need, especially in rural areas whose health-care problems are just as dire but not as well known as those of the inner city. And third, to develop methods to curb ballooning health costs that consume 12 percent of our gross national product every year and make us less able to compete in today’s world market.



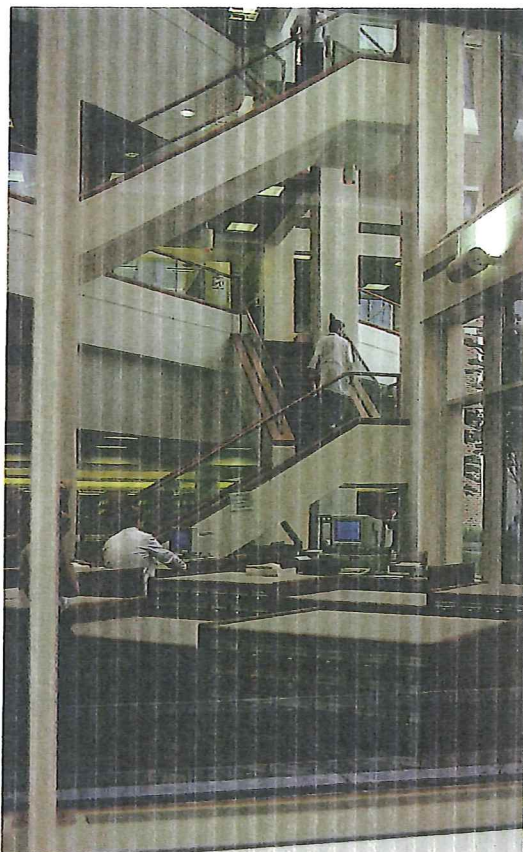
The impact of the Bowen Center also will be felt through education. By training fellows in these new areas of research, our knowledge will be increased as they continue their work at Indiana University and throughout the country. In that way, the return on our investment in the Center is multiplied.

Walter J. Daly, M.D., dean, Indiana University School of Medicine

As the population ages — and by the middle of the next century there will be more than a million people over 100 years old — the need for solutions will become even more of an economic imperative. We need more people doing this kind of research. The answers seem so simple yet the impact is so profound. It is my belief that the Bowen Research Center will spearhead that effort.

Otis R. Bowen, M.D.

*Vital answers
mean new hope
on the horizon.*



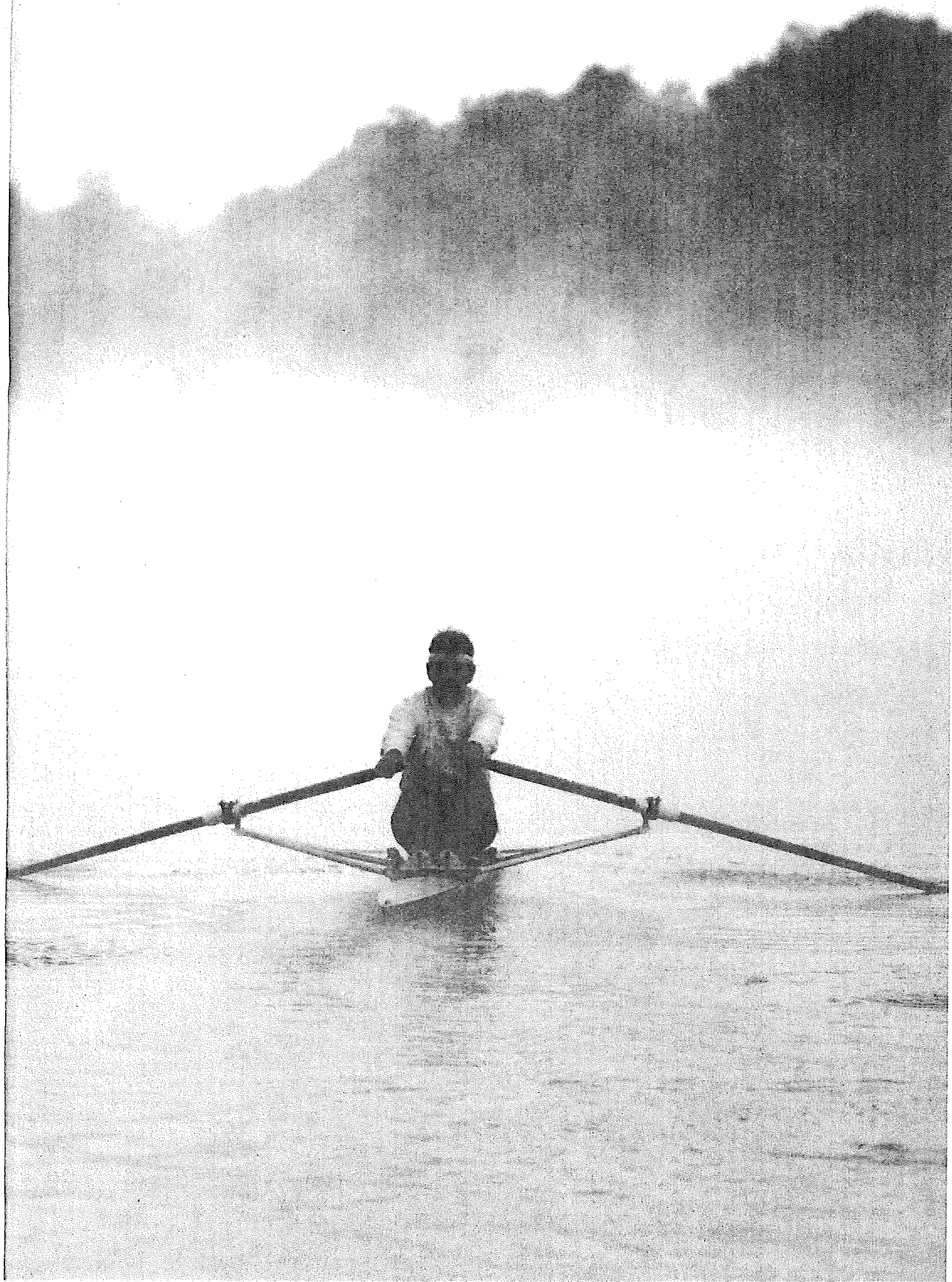
When the book is closed on the 20th century, we'll look to Indiana for having given this country one of the greatest

Americans of our time — Otis R. Bowen.

Thomas R. Burke, *consultant to the insurance industry,*
Washington, D.C.

We'll also look to Indiana and the Indiana University School of Medicine for having given us a unique research center, supported by the people of this state as well as those everywhere who want to honor a great man who selflessly devoted himself to improving our future.

New hope for better health, better care for all, and more affordable care is on the horizon. The Bowen Research Center is how it will become reality — by giving us the vital answers.



Photo, this page, shown left to right:

Glenn W. Irwin, Jr., M.D.

Co-chairman, the Committee for the Bowen Research Center Campaign and chancellor emeritus, Indiana University-Purdue University at Indianapolis.

Deborah I. Allen, M.D.

Chairman, Department of Family Medicine, Indiana University School of Medicine

Walter J. Daly, M.D.

Dean, Indiana University School of Medicine

Thomas M. Miller

Co-chairman, the Committee for the Bowen Research Center Campaign and chairman and CEO, INB Financial Corporation

Deborah A. Freund, Ph.D.

Senior investigator, the Bowen Research Center





THE BOWEN RESEARCH CENTER: PRIMARY CARE

The Bowen Research Center is the first institution of its kind solely dedicated to primary care in preventing "lifestyle" diseases. Primary care (the physician a patient first sees — family practitioners, internists, obstetricians, and pediatricians) is essential to improving America's health and reducing its health-care costs. The Bowen Center will address primary-care issues in three major areas of interest: Preventive medicine, rural health care, and health-care cost containment.

Preventive Medicine

One of the Bowen Research Center's major areas of endeavor will be preventable medical conditions, most notably those resulting from alcohol and other drug abuse, teenage pregnancy, and smoking. Current research clearly shows the risks of certain activities are well known, yet people continue these behaviors. The Bowen Research Center will investigate what messages and courses of action are effective and why, so these conditions may be prevented. And thereby reduce unnecessary loss of life and reduce the cost to society of treating these ills.

- Half of all crimes are committed under the influence of alcohol or drugs; over two-thirds of those convicted test positive for drugs.
- More people are killed in alcohol-related auto accidents in one year than were killed in ten years in Viet Nam.
- Drug abuse costs Americans \$65 billion a year and is one of the principal causes of AIDS and a major contributor to illiteracy, child abuse, domestic violence, poverty, and corruption.
- Annual costs associated with alcohol abuse will be \$150 billion by 1995.
- Health costs to a family with an alcoholic member are twice those of other families. Employees with a drinking problem are absent 16 times more than average.
- Teen pregnancies cost the government \$18 to \$20 billion a year in welfare and related costs. The United States has one of the worst teen pregnancies records of any developed nation — 3,000 a day.
- Smoking causes 350,000 unnecessary deaths a year. Smokers are ten times more likely to develop chronic lung disease; smoking doubles the risk of heart disease.

"When it's obvious that smoking is very dangerous to one's health, and when that information is widely disseminated and is even labeled on every package of cigarettes, why do people continue knowingly to harm themselves and society? It's a behavioral problem for which we have no answer, but which needs scientific attention and research."

Otis R. Bowen, M.D.

Rural Health Care

"All the ills associated with the health-care crisis in our cities — providing adequate, affordable, and available primary care — are also found outside those cities but are compounded by distance from services and a lack of research attention to the problem. High infant mortality rates such as those in Indiana likewise are as much a rural as an urban issue."

Robert T. Van Hook, executive director, National Rural Health Association

Primary-care physicians are essential in the effort to help prevent the "lifestyle" diseases studied by the Bowen Center. As the

determine what type of care to deliver, what care is appropriate, and what care is cost-effective.

Researchers will evaluate how outcomes of treatment are influenced by factors such as differences between specialties and the types of health-care systems in which they practice. The ultimate goal of this type of research would be to identify those features of the medical-care system that are essential to good health outcomes so they can be preserved as the nation's health-care delivery system is restructured in a drive to control costs.



One of the major missions of the Bowen Center will be to study solutions to these primary-care problems.

TYPICAL SAMPLE PROJECTS

A comprehensive manpower study already underway will help law-makers, medical schools, and communities more accurately plan for future needs by documenting each physician in the state by age, expected retirement age, location of practice, specialty and other pertinent information.

Linking family physicians providing prenatal care to the Center via computer, pregnant diabetics or those who develop gestational diabetes would be given computerized blood sugar monitoring units that hold test results in memory. The units would be hooked via modem to the Diabetes Research Center for evaluation and patient care adjustments by telephone. The result is easy access to comprehensive prenatal care everywhere in the state and subsequently fewer complications and a decrease in infant mortality.

Health-care Cost Containment

The Bowen Center's cost containment research, developed by senior investigator, Deborah A. Freund, Ph.D., an internationally recognized expert in the field, will focus on economics, quality, and standards of care with the ultimate goal being taxpayer benefits and better patient care. This work is already in progress as Dr. Freund is one of five investigators chosen by the federal government to do important medical outcomes research.

"Some see only threat in this era of cost containment. I see challenge and opportunity."

Otis R. Bowen, M.D.

As one of its major challenges, the Bowen Research Center will study ways to halt the alarming increases in medical costs without compromising health-care delivery. Not only would individuals and their insurance companies benefit but so would our economy as a whole.

Consider: The United States is the world's largest producer of health care, accounting for 12 percent of our gross national product. By contrast, Japan and European countries spend between 6 to 8 percent. Clearly, our ability to compete internationally is negatively affected by health-care costs.

Part of reducing the country's medical costs without compromising quality of care is planning for the aging of our population. By the year 2030, we will have 8.6 million Americans over age 85; over 20 percent of our entire population will be of retirement age. To formulate the Bowen Center's concern for the aging, it has assimilated the Heartland Center for Aging, Disability, and Long-Term Care. One of three institutes funded by the Administration on Aging, a department of Health and Human Services, the Heartland Center will assist communities, physicians, and area agencies on aging in understanding the needs of older Americans and the steps they can take to help this population.

Also in the plans is a consortium of medical, academic, and business experts to help legislators and corporations formulate cost-effective health policy decisions through supplying support and targeted information and research.

TYPICAL SAMPLE PROJECTS

Linking physician's offices throughout the state would provide a large research base to determine current characteristics of the health status and the need for services. With this large patient base, it would be possible to follow thousands of patients in ambulatory settings to determine what type of care to deliver, what care is appropriate, and what care is cost-effective.

Researchers will evaluate how outcomes of treatment are influenced

Rural Health Care

"All the ills associated with the health-care crisis in our cities — providing adequate, affordable, and available primary care — are also found outside those cities but are compounded by distance from services and a lack of research attention to the problem. High infant mortality rates such as those in Indiana likewise are as much a rural as an urban issue."

Robert T. Van Hook, executive director, National Rural Health Association

Primary-care physicians are essential in the effort to help prevent the "lifestyle" diseases studied by the Bowen Center. As the first patient contact, these physicians are vital to prevention and therefore to cost containment. But their numbers are decreasing — particularly in rural areas where isolation, attrition due to retirement, larger patient loads, and economics have driven many out of practice, already leaving at least one Indiana county with no doctor whatsoever.

The impact on our state is significant. More than 20% of Indiana counties have a population of 20,000 or less. That means that in one out of five counties, Hoosiers may not have access to adequate medical care and therefore would be less likely to see physicians at a stage when preventive measures are most effective.

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THE BOWEN RESEARCH CENTER: OTIS R. BOWEN, M.D.

A.B., Indiana University, 1939
M.D., Indiana University School of Medicine, May, 1942
Army Medical Corps
Family practice, Bremen, Indiana, 1946-1972
Marshall County Coroner, 1952-1956
Indiana House of Representatives, 1956
Re-elected, 1960, to serve six more terms
House Minority Leader, 1965
Speaker of the House, 1967, 1969, 1971, 1972
Governor, state of Indiana, 1973-1981
Professor of Family Medicine, Indiana University School of Medicine, 1976
The Secretary of Health and Human Services, Dec., 1985-Jan., 1989

Chairman:

National Governors' Association
Republican Governors' Association
Midwestern Governors' Conference
Education Commission of the States
Interstate Mining Compact Commission

Board of Directors:

The Lilly Endowment
Indiana Bell
Indiana National Bank
Hook Drugs
Meridian Mutual Insurance Company
Public Service Indiana

Committees:

Legislative Services Study Commission
Dean's Advisory Council, Indiana University School of Medicine
Wishard Hospital-Indiana University School of Medicine Committee
Campaign for Indiana
First Citizen Fellow for the Institute of Advanced Studies,
Indiana University

Member:

Board of Trustees, Valparaiso University and Ancilla College

Major Accomplishments as Governor:

- First Indiana governor to serve two consecutive terms
- Enacted landmark legislation on medical malpractice awards
- Major tax reform of 1973: reductions in property taxes and controls on spending
- Unigov reorganization
- Accelerated building of state highway system
- Title 20: expansion of social services to the indigent and elderly
- Established Emergency Medical Services Commission

**Major Accomplishments as Secretary of
Health and Human Services:**

- Served longer than any previous secretary in the department's 35-year history
- Administered one of the largest federal departments which includes the Food and Drug Administration, the Public Health Service, and Social Security
- Controlled the largest budget in the federal government
- Cleared long-standing bureaucratic backlogs yet streamlined the department from 135,000 to 114,000 employees
- Proposed catastrophic health-care bill
- Over a third of recommendations enacted into law

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THE BOWEN RESEARCH CENTER: THE PEOPLE

The Bowen Research Center will be an initiative of the Department of Family Medicine in the Indiana University School of Medicine and will be overseen by the chairman of that department, Dr. Deborah I. Allen.

Deborah I. Allen, M.D.

Chairman, Department of Family Medicine,
Indiana University School of Medicine
Associate professor, School of Medicine
Director, Student Employee Health Service
Practicing primary-care physician

The Bowen Research Center will comprise a multidisciplinary cross-section of academic and medical professionals including fellowship recipients, liaisons with primary-care physicians, the physicians themselves, statisticians, and support staff. The core of the Center's research activities will be headed by three senior investigators, one for each of the three research themes: Prevention, rural health-care, and health-care cost containment. All three will be nationally recognized experts in their fields as is evidenced by Dr. Deborah A. Freund, senior investigator in the area of health-care delivery systems and socioeconomic issues.

Deborah A. Freund, Ph.D.

Professor, School of Public and Environmental Affairs,
Indiana University
Adjunct professor, School of Medicine
Adjunct professor of Economics, College of Arts and Sciences
Ph.D., Economics, the University of Michigan
M.P.H., Medical Care Organization and Health Care Administration,
the University of Michigan
M.A., Economics, the University of Michigan
A.B., Washington University, St. Louis

National offices:

Board of directors, Association for Health Services Research
Board of directors, Association of University Programs in
Health Administration
Chairperson, Medical Care Section, American Public Health Association

"At the heart of the Center will be a cadre of investigators who, in the next ten years, will be doing the most exciting, cutting-edge research in the field."

Deborah A. Freund, Ph.D.

Senior investigator, the Bowen Research Center