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Article Information

Journal Title: Journal of the Florida Medical Association ✓

Volume: 76 ✓ Issue: 10 ✓

Month/Year: October 1989 ✓ Pages: 889-895 ✓

Article Author: William J. Bigler ✓

Article Title: 100 years of public health in Florida-The fourth quarter, 1965-1989 ✓

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Loan Information

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100 Years of Public Health in Florida

The Fourth Quarter, 1965 – 1989

William J. Bigler, Ph.D.

EDITOR'S NOTE: The Third Quarter, 1940-1964, of Dr. Bigler's 100 Years of Public Health in Florida appeared in the September issue of The Journal of the Florida Medical Association.

Dramatic changes occurred during this quarter that affected the SBH's philosophical thrust, organizational structure, and programmatic direction. Several federal and state legislative initiatives caused many public health programs to be assigned to other agencies during the 1960s; then the 1969 legislature eliminated the SBH and transferred its functions to an administrative division in an umbrella agency called the Department of Health and Rehabilitative Services. Another extensive legislative reform in 1975 threatened to disrupt the integrity of federal, state and local funding mechanisms and severely alter the state's role in delivery of local health services. After more than a decade of successfully coping with the endless challenges associated with reorganization, federal and state austerity initiatives, and critical public health issues, the state's health agency emerged stronger and more dynamic than ever before.

Program transition, reorganization and expansion

● During the third quarter, public health expanded primarily via an admixture of funding and administrative direction from federal, state and county sources. The unique aspect was that the CHDs were not obligated to participate in federal or state programs: the SBH administered programs statewide by negotiated formal agreements. For several decades this relationship allowed most CHDs the latitude to collaborate with a multitude of diverse agencies, organizations, and institutions. It also provided an opportunity to develop new initiatives and furnish an increasingly wide variety of community services with a minimum amount of administration and management by the state. By the mid-1960s the scope, volume and complexity of these services had increased to such extent that there was general recognition that public health

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programs could be more effective through increased coordination by the state.

At the beginning of the fourth quarter there were conflicting views on community mental health. The SBH held that public health at the community level should be concerned with total health, physical and mental; however, others believed that all curative and preventive mental health activities in hospitals, community centers and community programs should be under one direction. After some debate, the 1965 legislature transferred the state Mental Health Authority from the SBH to the newly established Board of Mental Health.

The provision of hospital services to the indigent and medical assistance to the aged were major public health activities, but the advent of Medicare in 1965 and Medicaid in 1969 removed this responsibility. Other losses in 1967 included responsibility for narcotic control (transferred to the Florida Bureau of Law Enforcement), for air and water pollution (transferred to the Department of Air and Water Pollution Control which later became the Department of Environmental Regulation [DER]), and for dairy inspection and quality assurance of milk products (transferred to the Department of Agriculture and Consumer Services).

The revised state constitution of 1969 consolidated more than 200 agencies into 23 departments. Some 25 health and social services agencies became the Department of Health and Rehabilitative Services (HRS) and public health functions became the Division of Health (DH), but CHDs remained essentially unchanged. The *Ocala Star-Banner* editorialized on June 23, 1969, that the "Board of Health is Dead." The sweep also abolished the State Board of Tuberculosis and Pest Control Commission and transferred their functions and activities to the DH.

Despite these losses, progress continued as evidenced by expansion of existing programs and implementation of new initiatives. Federal funds expanded programs directed at mothers and children and sponsored meaningful environmental research (arbovirus and rabies ecology, mosquito population dynamics, occupational pesticide poisonings) during the beginning of this quarter. The Bureau of Laboratories began providing a variety of diagnostic services at branch laboratories, and the Bureau of Health Facilities included certification of service providers such as hospitals, nursing homes, home health agencies and independent laboratories.

Family planning, prenatal, infant and child care services ● Federal funding enabled the Family Planning Program to expand its services into every CHD except one. During the next few years the number of persons served increased by 30% to 40% each year. In addition to oral contraceptives and IUDs, other contraceptives were provided such as

condoms, spermicidal foams, jellies and diaphragms. A dramatic increase in pregnancies among teenage unwed mothers during the early-1970s prompted a policy of providing family planning services to teenagers without parental consent.

The U.S. Public Health Service awarded the SBH \$3 million in 1967 to support five Maternity and Infant Care (MIC) projects in 13 rural counties in north central Florida and Orange, Palm Beach, Broward and Dade Counties designed to reduce the rates of infant and maternal mortality, prematurity, brain damage, neurologic disability and mental retardation through improved prenatal care. In addition to clinic services the projects provided social case work, direct nutritional services, dental care, day care and homemaker services, transportation, payment for hospitalization and medical consultation and treatment. About the same time the Dade CHD initiated a PHS funded children and youth (C&Y) project to provide a similar program of intensive high quality services for preschool children. These projects subsequently expanded into other areas and continued for over a decade before being melded into other programs. The initially federally-funded Improved Pregnancy Outcome (IPO) project modeled by HRS and the Lee CHU in 1978 was expanded statewide with state funds between 1982 and 1986.

The SBH with support of the FMA initiated a program for screening newborn infants for phenylketonuria (PKU) and other metabolic disorders in 1964, and soon the Bureau of Laboratories began PKU screenings for all infants. CHU staff counseled mothers of those found positive and required special diets were supplied to the indigent. CHDs used new vaccines to prevent measles, rubella and mumps in children and initiated a federally-funded Medicaid initiative to provide Early and Periodic Screening, Diagnosis and Treatment (EPSDT) to eligible children during the early 1970s. Federal funds were used to research sudden infant death syndrome (SIDS) and provide family counseling services and professional education to health care providers.

The Nutrition Program grew rapidly because of funding in the MIC and C&Y projects. A comprehensive study of migrant nutrition in 1970 and 1972 by the Division of Health, Lee and Palm Beach CHDs clearly demonstrated the needs of this population¹⁴ and subsequently PHS funds supported a supplemental food program for women, infants and children (WIC) in six counties. It expanded rapidly with federal support and was active in all CHUs by 1981.

Adult health and emergency medical services ● Over 61,000 persons were screened for glaucoma in 1965 and this became an ongoing activity at most CHDs. Cervical cytology programs were initiated

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in 15 counties not having tumor clinics and within a decade became active in all CHDs in a variety of clinic settings. A Bureau of Adult Health Services and Chronic Disease was established in 1966, giving new emphasis to programs addressing diabetes, cancer and heart disease, and a PHS-funded oral cancer screening project supported by the dental profession provided diagnostic services for patients with suspect lesions. The federal Regional Medical Program through a series of grants to the SBH developed, tested and evaluated the effectiveness of cardiovascular screening as a disease prevention activity. Results spawned development of the hypertension screening program in the 1970s in conjunction with the national high blood pressure education program.

Special studies of seat belt usage, automotive crash injuries, and deaths due to drowning conducted by the accident prevention program in collaboration with other agencies ultimately signaled the rise of emergency medical care as a future public health issue. Legislation modeled after the Federal Highway Safety Act served as an initial step in developing a statewide Emergency Medical Services (EMS) system in 1966 to assure that injured patients would have the best emergency medical care possible at the scene of the accident and during transportation to the hospital. The SBH was assigned authority to license ambulances and define the role and education of ambulance drivers; however, the program was not formalized for some time and certification of emergency medical technicians still later. New legislation expanded the program to include telecommunications systems (911 hotline), EMS grants to local governments and regulation of medical transportation services.

Organizational reform and transitional challenges

● The 1974 legislature appropriated \$300,000 for HRS to define a minimum public health program and determine its cost and that year federal mandates (Public Laws 93-641 and 92-603) created a State Health Planning and Development Agency (HSPDA), Health Systems Agencies (HSA) and Professional Standards Review Organizations (PSRO). Dr. Sowder retired in July 1974 and E. Charlton Prather, M.D., M.P.H., Director of the Bureau of Preventable Diseases, was appointed his successor.

The legislature passed the "HRS Reorganization Act" in 1975 to decentralize and unify the provision of health, rehabilitative and social services which had a tremendous impact upon the public health organization. All bureaus, sections and units were restructured and/or reassigned to one of 11 HRS District Offices or one of three HRS Central Offices, Administration, Planning and Program Development and Operations, in Tallahassee. A management arm, the Health Program Office (HPO), was assigned responsibility for program

planning, policy development, quality assurance and standard setting. The transfer was particularly disturbing to long-term employees. Disruption in working and living arrangements and dismantling of a once proud agency depressed morale and initiated early retirement of key staff.

Several long-standing programs and essential support services were eliminated. Publication of the annual report, a nearly continuous historical record since 1889, and "Florida Health Notes" was halted. The VPH, nursing, health education, nutrition, and research programs and most notably the Bureau of Local Health Services were eliminated. All sanitary engineering personnel were transferred to the DER, a serious loss for an agency which viewed environmental control as a major method of protecting the public health. An extensive film library was dismantled and the medical reference library was transferred to the University of Florida Borland Library.

The CHDs had operated rather independently up until this time; now they were mandated to function within another context which precipitated confusion regarding the roles, responsibilities, and relationships between the state and local agencies. The CHDs became county health units (CHUs) and retained their identity as local governmental bodies as provided by Chapter 154, Florida Statutes; however, each one derived operational supervision and direction from the respective HRS District Office. The state's role in delivery of local health services, unchanged for nearly half a century, became the subject of considerable discussion and controversy. The HPO began to explore alternatives for establishing viable linkages with district offices and CHUs.

Uniform programs, accountability and improved services

● The HRS Secretary initiated a special study to review problems facing public health in Florida in mid-1977, and the structure, function and funding of programs. The panel of experts recommended: (1) a revision of the public health mission which emphasized improved services and coordination with other governmental units, private providers and voluntary organizations and (2) establishment of a uniform public health program with established performance standards, defined target populations and measurable outcomes.¹⁵ The Secretary directed the HPO to develop a "Comprehensive County Health Unit Program" with the intention that the system would ultimately allow the CHUs to improve their image and demonstrate their ability to develop, manage and account for any new program or funding initiative.

A few public health programs expanded during the years immediately following reorganization. The Nurse Practitioner Act was amended to authorize the practice of selected medical arts. Diabetes was identified as a major public health problem and

Diabetes Treatment and Research Centers were established at three state universities. The Radiation Control Program conducted fee-supported certification of radiologic technologists and amended PKU legislation included other genetic and/or metabolic diseases and screening tests for hypothyroidism, galactosemia and maple syrup urine disease.

Categorical federal funding became available for fluoridation of community water supplies in 1979 when less than one third of the state's population had this benefit. The federal Safe Drinking Water Act provided impetus for testing community and private water supplies for toxic chemicals and radionuclides, and a cancer registry, Florida Cancer Data System, was implemented to measure the magnitude of the problem. It provides data for epidemiological studies, investigations, service programs and cancer care facilities. Other initiatives spawned during the late 1970s, hypertension control, family planning, IPO, and WIC, became established programs.

Management systems, district offices and county contracts • Dr. Prather served until the summer of 1979 when he became a district health officer and was succeeded by James T. Howell, M.D., M.P.H., assistant health officer in Palm Beach County. The CHU Management System was successfully implemented after concerted effort, a strong, yet flexible, foundation of program policies, operational protocols and a computerized system for accountability had been built by July 1981.¹⁶ Activities related to data input and management, report production and linkages to other departmental systems are continually being improved. The present system provides timely information for a variety of national, state and local applications.

The Bureau of Local Health Services field consultants were assigned to district offices in 1976 to direct the operation and coordination of health-related functions and provide liaison, consultative services, and technical assistance to the CHUs. In 1978 they were reorganized as multidisciplinary teams supervised by the HPO but housed within five district offices. After implementation of the CHU Management System, they were reassigned to district health offices.

Dr. Howell was appointed HRS Deputy Secretary in November 1981 and served for the next four years. He continued as acting director of the Health Program Office until April 1982 when Stephen A. King, M.D., on temporary assignment from the PHS was appointed director. Shortly thereafter, a state budget shortfall caused "productivity cuts" that forced HRS and the HPO to reassess program priorities and make necessary personnel and funding adjustments. The 1982 legislature formalized the relationship of state and local governments for the delivery of local health services. This included

a provision for annual contracts and clarified accountability for public health services.

Environmental epidemiology and chronic disease prevention • Dr. Howell and Dr. King were committed to development of an environmental epidemiologic capability within the HPO. Existing resources were used to create an expanded disease control, epidemiology program in early 1983 which included chronic disease and environmental hazards units in addition to the acute and communicable disease control unit. Major concerns related to chemical, radiologic and heavy metal contamination of drinking water supplies;¹⁷ however, crisis issues such as contamination of private and community wells by the agricultural chemicals, aldicarb and ethylene dibromide, challenged the program's capability. A toxicology unit supplied technical expertise and working with the district offices, CPHUs, and laboratory calmed public fears, conducted appropriate tests, provided alternate sources of potable water, and sought long-term solutions to the problem.

Shortly thereafter, the epidemiology and toxicology units and laboratory received general revenue funding which enabled these staffs to study congenital defects and participate in the investigation of cancer clusters and other noncommunicable disease outbreaks. They also collaborated with other state agencies, county health units and laboratories to identify and rehabilitate leaking underground storage tanks. Other responsibilities included a study of water quality in private wells, environmental surveys for heavy metals and chemicals and assessment of health risks in areas near toxic waste dumps.

The chronic disease program collaborated with the PHS/CDC in 1985 to establish a behavioral risk factor surveillance system for randomly surveying Florida residents regarding health behaviors and the next year the legislature funded a model Comprehensive Health Improvement Project in county health units directed toward prevention of heart disease, high blood pressure, diabetes and cancer.

AIDS, TB, STDs, and primary care • The Health Program Office began conducting surveillance on AIDS cases in early 1981 and it was declared a reportable disease by mid-1983 after a total of 165 cases had been reported. State funds were not available to develop programs but fortunately in 1984 and 1985 PHS/CDC grants totaling more than \$1 million supported initial surveillance, health education activities, an AIDS "Hotline" and human immunodeficiency virus (HIV) counseling and testing services. After the legislature appropriated general revenue funds, the HPO established a formal program in late 1985.

Dr. King resigned in November 1985 and Dr. Howell served a second term as state health officer

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until August 1986. He was instrumental in creation of a Governor's Task Force on AIDS and this group formulated prevention policies and guidelines and facilitated health care and treatment services for patients. The AIDS program experienced phenomenal growth. The 1988-89 budget of over \$30 million supported surveillance, education and counseling and testing activities, risk reduction education, partner notification and patient care, serologic surveys to assess HIV antibody status in selected populations and an epidemiologic study of HIV infection in children attending county public health unit clinics.

Reported cases of TB showed a 6% annual case rate increase in 1985 and the state ranked highest in the nation with a rate of 12.7 per 100,000 population. This raised suspicion that compromised immunity secondary to HIV infection may favor activation of preexisting latent *Mycobacterium tuberculosis* infection. The CDC provided evidence that HIV was causing a resurgence of TB in the state. About 10% of AIDS patients had TB and those served by county public units were offered HIV testing and counseling and HIV seropositive individuals were offered TB testing.

The scope of the VD program, which until 1981 had addressed the five classical venereal infections, was expanded to a variety of sexually transmitted diseases (STD) and renamed accordingly. The program included counseling, testing, partner notification and health education/risk reduction activities. Syphilis cases had doubled, congenital syphilis cases increased 20 fold and 3% to 8% of clinic patients were found to be infected with HIV. A new legislative mandate for control of STDs (Chapter 384, F.S.) now provides a model for the nation.

Several social issues changed public health programs and delivery of local health services. Perhaps the most dramatic was legislature-directed attention to medical care needs of the indigent in the late 1970s. The resulting Health Care Access Act in 1982 declared that access to health care was a right of every Floridian and directed the county public health units to provide "sick care" where there was manifest need. The Indigent Health Care Act of two years later expanded the philosophy of provision of indigent medical care and provided funding. Primary medical care was provided in all county public health units by 1988 and statewide some 25% of local effort was devoted to this activity at an annual expenditure of \$32 million. A companion program directed at recruitment of National Health Services Corps scholarship physicians and private physicians for placement in medically underserved areas supported this effort.

Partners, research, special studies and health education • The Florida Medical Association, Florida Hospital Association, Florida Dental Association, Florida Veterinary Medical Association, other

professions and their local and national counterparts have supported public health in Florida throughout the years. Health-related commissions, councils, and boards have also provided support at critical times and their efforts stimulated development and expansion of chronic disease diagnosis and treatment, hospitalization for the indigent, maternal and child care, infant screening, developmental evaluation, childhood immunization, school health examinations, family planning, dental care, fluoridation, emergency medical services, safe drinking water, sewage disposal, hazardous waste management, radiation control, and rabies vaccination. They have also aided the delivery of local health services.

Likewise the Association of State and Territorial Health Officials, the American Public Health Association and its Southern Branch have pioneered public health programs and activities. Federal agencies such as the DHEW, NIH and PHS, in particular the CDC and Region IV, have been enormously helpful over the years. Their provision of technical expertise and financial support to expand programs and implement new initiatives has proven essential to overall development of Florida's public health system. Organizations such as the Florida Public Health Association, Florida Association of County Health Officers, Florida Environmental Health Association, and Conference of Public Health Nurse Consultants, Administrators, Supervisors and Educators also played a significant role in evolution of the system and its policies, programs and professional staff.

Broadly defined research has been a part of public health efforts in Florida since establishment of the SBH. Early activities focused on yellow fever and malaria vector studies. The major interest following World War II was infectious diseases such as enteric infections, rabies, typhus fever, pulmonary disease simulating tuberculosis and viral encephalitis. Insect vector and natural history studies began in the early 1950s at the Entomology Research Center. The SBH formally coordinated research activities within the agency in the mid-1950s but a Bureau of Research was not established until 1964. Most research conducted during the 1960s and 1970s was supported by federal grants supplemented by funds and other resources from the SBH, CHDs and state universities. The Encephalitis Research Center in Tampa produced new information on St. Louis encephalitis and other pathogenic arboviruses.¹⁸ This facility was renamed the Epidemiology Research Center in 1969 as its scope expanded to include environmental studies; most notably those related to viruses in wastewater.

Hundreds of special studies have been conducted, consistently addressed needs and improved public health services and operations. In the early 1970s nearly every Bureau conducted some type of research project or special study on an ongoing basis

with findings published in annual reports as well as professional journals. Many have been published in the Monograph Series (1962-1974), Special Studies Series (1971-1973) or as special departmental reports. Public health research, while not encouraged by HRS for a decade after departmental reorganization, has been recognized as an essential element of innovative and productive program development.

After a decade of low visibility, health education was again recognized as a distinct program entity in 1988. The health promotion and education program espoused a systematic approach to disease prevention and professional, community, school and client education. One notable project was the Planned Approach to Community Health which promotes networking and communication between individuals, groups and organizations to identify, prioritize and effectively resolve community health problems. The program also assists county public health units with development of community health status profiles based on morbidity and mortality data so intervention strategies can be targeted to areas of critical need.

Several county health units and state level disease prevention and control programs have effective health education components. In fact, a significant amount of the AIDS prevention program is dedicated to activities focusing on risk of HIV infection and individual protection measures. This experience could demonstrate the potential effectiveness of unique health education approaches that could have application to other HRS programs.

Epilogue

An outstanding characteristic of Florida in these 100 years has been change, and development of the state's public health system much like a roller coaster ride. Programs and policies have been continuously influenced by political, social and economic issues. Still, the mission has remained essentially the same. Solid working relationships have been developed with the legislature and professional associations, organizations, voluntary agencies, educational institutions and advocate groups. Additionally, an array of public health initiatives, federal, state and local, have emerged to meet critical needs. Many have evolved into statewide programs, some in other agencies, that have expanded, strengthened and proved their worthiness.

Most of this century the SBH was recognized as one of the nation's finest state public health agencies. Relegation to the status of a Division and then an Office within HRS somewhat diminished the visibility of its accomplishments. In recent years, however, achievements have merited recognition. It was most appropriate that the 1988 legislature elevated the status of the Health Program Office, the state health officer to deputy secretary for health and consolidated all public health activities into a

single program. The HPO became the state health office (SHO). Each district office has a deputy district administrator for health and assistant state health officers are responsible for key state level program areas including environmental health.

Florida's population likely will continue to grow very rapidly. Such growth brings a multitude of physical, mental, social, economic and environmental problems, many public health issues. The drinking water supply already is beginning to be affected by chemical contamination and adequate quantities are lacking in some areas. Air pollution continues to worsen and some public buildings are contaminated with asbestos and radon. Problems related to disposal of sewage, toxic chemicals, radioactive materials, infectious hazards and solid waste disposal also beg resolution.

The rising cost of health care and a multitude of complex medical/social issues with ethical and religious overtones impact the delivery of public health services. The dramatic rise in teenage suicides, homicides, motor vehicle accidents, and pregnancies is a complex societal issue. Infant morbidity and mortality related to congenital syphilis, fetal alcohol syndrome, and cocaine addiction, and infection with herpes and HIV continue to rise. It is a sad commentary that this tragic waste of a precious resource continues because appropriate intervention strategies lack adequate funding support. Some progress has been made, but the effects of using illegal substances, alcohol and tobacco, i.e., mental disability, cancer, emphysema, heart disease, STDs, TB and AIDS, still impact productivity, impair the quality of life and cause premature death. Of these, the prevention and control of AIDS and treatment of AIDS patients will undoubtedly be an important public health challenge of the next century.

Refugees from economically depressed countries continue to immigrate into south Florida. Retirees on limited incomes, migrant workers, and the homeless present special concerns. More than ever before the adult population is practicing risk-taking behavior: improper diet, lack of exercise and poor stress management. Likewise many chronic debilitating diseases, traumatic events like abuse and sexual battery and needs related to health care access for the indigent and elderly have yet to be adequately addressed.

With sufficient resources and legislative support, the State Health Office in cooperation with other agencies, organizations, associations and institutions could have a significant impact on many of these public health issues. Unfortunately, limited resources have to be directed to the most critical issues. Still, beginning with the catastrophic crises of "yellow jack" to the present day epidemic of AIDS, the state's public health system has always risen to the occasion. Thus, there is reason to believe that its people will find a way to

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meet the challenges and continue to improve the quality of life for all Floridians.

Acknowledgment

I am grateful to Dr. E. C. Prather for his contribution and evaluation of this review of public health in Florida over the past 100 years. Review by William Mahoney, Shannon Fenn, Dr. Michael Wilder and Deborah Murphy was most helpful as was the manuscript preparation by Sheri-lyn Dunlap.

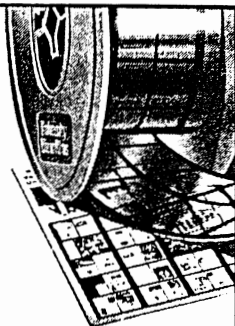
References

14. Kaufman, M.; Lewis, E.; Hardy, A.J., and Proulx, J.: Families of the Fields: Their Food and Their Health, Florida State Board of Health Monograph No. 13, 1973.
15. The Future Role and Mission of Public Health in Florida: Meeting the Challenges of the 1980s and Beyond, Report of the Florida Department of Health and Rehabilitative Services, Tallahassee, 1978.
16. Bigler, W.J.; Mittan, J.B., and Wisthuff, R.R.: Florida's New Local Health Unit Management System, Florida Department of Health and Rehabilitative Services, Special Report, July 1981.
17. Pfaffenberger, C.D.; Davies, J.E.; Atkeson, T.D., and Kurtz F.W.: Current Research Activities on Some Toxic Environmental Substances of Major Concern to Floridians, J. Florida M. A. 72:419-425, 1985.
18. Bond, J.O.: St. Louis Encephalitis in Man, Florida State Board of Health Monograph No. 12, 1969.

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