REPORT OF THE
VIRGINIA HEALTH
PLANNING BOARD

Access To Obstetrical Care

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

SENATE DOCUMENT NO. 27

COMMONWEALTH OF VIRGINIA
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ACCESS TO OBSTETRICAL CARE

Table Of Contents

EXECUTIVE SUMMARY

Virginia is experiencing a growing crisis in its obstetrical care system. While the statewide infant mortality rate (10.4 infant deaths per 1,000 live births in 1988) is similar to that of the nation, the five-year average ranges from 7.3 in the New River Valley to 18.9 in the City of Richmond. A study by the Institute of Medicine is representative of many reports documenting that poor pregnancy outcomes (such as miscarriages, preterm or low birth weight deliveries, and infant deaths) are more prevalent among mothers who receive no prenatal care.[6] In Virginia, however, accessing care early in pregnancy is becoming increasingly difficult for poor women, for uninsured women, and for women in rural localities and inner cities.

- In Virginia, less than 60 percent of adolescent mothers receive prenatal care during the first trimester of pregnancy compared with over 80 percent of those who are older.

- Many areas of the Commonwealth - particularly those outside the urban crescent from Northern Virginia through the Richmond area into Tidewater - do not have enough physicians who provide obstetrical care. Those areas generally exhibit higher infant mortality rates than elsewhere in Virginia.

- Less than half of the physicians completing obstetrics/gynecology residencies at Virginia's medical schools establish practices in Virginia; of those who do, 92 percent locate their practices in metropolitan areas rather than the medically underserved areas which contain one fifth of Virginia's population.

- Population growth in many (predominantly rural) areas that are already medically underserved has not been sufficient to attract and retain physicians.

- Less than half of Virginia's obstetricians are accepting new Medicaid patients.[11] In 51 counties the local health department was the sole location for prenatal care for Medicaid recipients during 1988.

- Among Virginia's current obstetrician/gynecologists and family practitioners who have ever practiced obstetrics, nearly one third have given it up and over half of the remainder say that, due to liability concerns, they are very likely do so sooner than usual.[11]

The cost of this crisis is substantial. The State Perinatal Services Advisory Board has estimated that each year more than $1.6 billion in neonatal special care unit costs could be saved in Virginia just through statewide implementation of aggressive preterm birth prevention efforts.[16]

In 1989 the General Assembly passed SJR 168 charging the Virginia Health Planning Board with examining the question of access to obstetrical care. This report to the Governor and General Assembly considers the causes of decreasing access to obstetrical care and identifies ways to manage the problem.

Inadequate access is generally caused by one or more of the following:

- *maldistribution of providers of care,*
- *financial barriers,*

- *system/attitudinal barriers,*
- *lack of public awareness of the problem*

Caregivers may be available, but located too far away for timely service; the woman may have difficulty obtaining transportation, even to a nearby service site. Direct payments required from the woman for services received may be unaffordable and thereby deter the seeking of needed care. The provider may not be willing to serve the uninsured or underinsured, or there may be a real or perceived difference in the way such women are treated. A woman may delay or fail to seek care because of lack of knowledge about her own health needs or where those needs may be met.

Each of these general barriers exist to some extent, singly or in combination, within many parts of Virginia; each must be eliminated or significantly reduced if access to obstetrical care is to be improved. Since the barriers are interrelated, some corrective actions may affect more than one barrier and the success of one action may depend on simultaneous implementation of another.

MALDISTRIBUTION OF PROVIDERS

Physicians who provide obstetrical care, such as obstetricians and family practitioners, often avoid locating their practices in medically underserved areas not only because of financial considerations, but also because of a desire to avoid isolation from sources of continuing professional education. As a result, the local health department is the coordinator of prenatal care in over two-thirds of the Commonwealth's medically underserved areas. A five-point plan has been developed by the Virginia Department of Health to attract primary care physicians to underserved areas through such avenues as enhancing medical school loan and scholarship programs, developing educational and practice opportunities, and creating financial incentives.

In Virginia and in other states, mid-level practitioners such as nurse practitioners and nurse midwives are authorized to perform certain medical acts under the supervision of a physician. These practitioners are particularly important in isolated, rural areas that lack sufficient primary care physicians to meet the medical needs of their residents or, as is the case in 15 of Virginia's health districts, where the area's physicians are not accepting indigent patients. While approximately 1,000 certified nurse practitioners are licensed in Virginia and potentially available for primary care (including about 80 who are employed by the Department of Health), current regulations of the Board of Medicine, Board of Nursing, and Board of Pharmacy pose barriers to the full utilization of these practitioners' capabilities such as by prohibiting nurse practitioners from prescribing or dispensing medications. The Department of Health Professions has established a Task Force on the Practice of Nurse Practitioners; it is currently examining such issues such as prescriptive authority and medical supervision, and is expected to submit an interim report to the Secretary of Health and Human Resources in December, 1989 and a final report in March, 1990.

Four **Preterm Birth Prevention** programs were established in Virginia through the cooperation of local health departments and perinatal centers. These programs, formerly funded by the federal government, were intended to

identify women at high risk of early births and provide frequent prenatal visits, counselling, nutrition services, and social work support to minimize the risk of poor pregnancy outcomes. The success of the programs has stimulated interest in expanding the concept to other local health departments as well as into the private sector. Such programs reduce the need for intensive medical care in hospitals. They compensate in part for a maldistribution of physicians.

RECOMMENDATIONS

I. In order to ensure providers are available throughout the state for all women regardless of their ability to pay, the Virginia Health Planning Board recommends that the Governor and the Virginia General Assembly:

A. support funding requests to increase access to basic medical care services by supporting and expanding the Commonwealth's primary care system;

B. empower the Boards of Medicine, Nursing, and Pharmacy to pursue the changes necessary to allow for broader participation by nurse practitioners, including nurse midwives, as appropriate, in the delivery of obstetrical care services;

C. provide funding and manpower to assist localities in the replication and expansion of joint public and private programs, providing greater access to quality prenatal care regardless of the patient's payment source.

FINANCIAL BARRIERS

Since its inception in 1966, the Medicaid program has seen a decrease in the proportion of Virginia physicians that participate; this is directly related to the declining percentage of physician charges that are paid by Medicaid. The Medical Society of Virginia survey of obstetricians and family practice physicians indicated that 80% of the responding obstetricians had accepted Medicaid patients at some point in their careers, but that currently, only 63% participate in the Medicaid program. In addition, approximately 45% of obstetricians are currently taking new Medicaid patients, and of those taking new Medicaid patients, over one half are restricting the number of Medicaid patients that they will see. The factors identified in the survey as the three most effective changes that could induce obstetricians to accept, or accept more, Medicaid patients, in order of priority were **1)** increased reimbursement **2)** less paperwork **3)** financial assistance with malpractice premiums.[11]

While major increases in Medicaid reimbursement rates have occurred since 1985, the lack of an automatic inflator has resulted in the value of Medicaid's reimbursement for obstetrical procedures falling from the 25th percentile of physician charges in 1986 to the tenth percentile by 1988. Beginning January 1, 1990, the rate will be raised to the 15th percentile, or $930 (includes prenatal, delivery and postpartum care) for an uncomplicated case; the Department of Medical Assistance Services has requested an additional increase to become effective in July of 1990. Regional variations in prices are also not recognized by Medicaid: in 1989 Medicaid

paid $625 statewide whereas the average physician charge for total obstetrical care with a normal delivery ranged from $1,212 in far southwestern Virginia to $2,161 in Northern Virginia. These factors make it difficult to attract and retain obstetrician participation in the Medicaid program: only 49 percent of all practicing obstetricians in Virginia performed one or more Medicaid-reimbursed deliveries in 1988; one tenth of that 49 percent were responsible for half of those deliveries.

Another financial barrier is the cost of medical liability insurance, which has been rising for physicians generally and which is significantly higher for obstetricians than for other primary care physicians. The latter aspect has resulted in a decline in the number of physicians performing obstetrical care. The two reasons cited most often by physicians for giving up the practice of obstetrics are high medical liability insurance premiums, and the risk of a medical malpractice action. In addition, respondents to the Medical Society of Virginia survey indicated that "*over one half* of the family practice physicians and obstetricians who currently provide obstetric services consider it *very likely that they will stop practicing obstetrics* sooner than they would ordinarily because of the risk of malpractice suits and/or high insurance premiums."[11] One approach Virginia has implemented to decrease the medical liability problem is the recently enacted Birth-Related Neurological Injury Compensation Act. The Act created a program designed to provide compensation to ensure lifelong care for infants suffering a neurological birth injury while under the care of participating physicians and hospitals. The Act is currently being studied by a legislative subcommittee for possible revision. Physicians would find obstetrics more attractive, and could be attracted to and retained in medically underserved areas, if their expected costs related to medical malpractice were further reduced.

For most indigent persons, Medicaid is the sole source of insurance. The federal Budget Reconciliation Act will soon require Medicaid coverage for certain persons at or below 133% of poverty level; in addition, states may choose under current law to raise that threshold to as much as 185% of poverty.

One of the most significant financial barriers to obstetrical care is the lack of a source of payment for medical care services among low-income working women who do not qualify for Medicaid. Many of these women work for small businesses that cannot qualify for or cannot afford to provide traditional health insurance as an employee benefit. These women may forego or delay prenatal care and therefore are more likely to require more costly services at the time of delivery.

RECOMMENDATIONS

II. In order to remove financial barriers to care, the Virginia Health Planning Board recommends that the Governor and the Virginia General Assembly:

A. fund the increase in Medicaid reimbursement rates sufficiently to attract and retain physician participation, incorporate regional variations, and include an automatic inflator to allow reimbursement rates to keep pace with increases in costs of care; phase in eligibility increments as authorized by

Federal regulations, to 133% of the poverty level as mandated in the federal Budget Reconciliation Act and ultimately to the fullest extent permitted under federal law;

B. enact legislative changes as required to enable private insurance and/or health maintenance organizations to offer affordable plans to small business employers such as has been proposed by Blue Cross and Blue Shield of Virginia, and require those plans to include maternity coverage for their employees and their dependents; *(Note: the Board recognizes, however, the relationship between affordability and the nature and number of coverage mandates.)*

C. focus existing resources and efforts to increase the availability of transportation for women to obstetrical care providers;

D. implement such approaches to the medical liability insurance issue as:

1. paying part of the medical liability insurance premiums for medical providers of obstetrical care for medically underserved communities and medically indigent populations;

2. endorsing those recommendations of the legislative study group researching the Birth-Related Neurological Injury Compensation Act which would enhance its utilization and effectiveness;

3. the Commonwealth assuming some or all of the financial risk of medical liability judgments against medical providers who provide obstetrical care for Medicaid and medically indigent patients in collaboration with the Department of Health;

4. encouraging statewide proliferation of medical mediation services such as those offered by the University of Virginia's Center for Public Service;

5. incorporating, within Virginia's approach to managing claims, elements of the administrative review system advocated by the Institute of Medicine.

SYSTEM /ATTITUDINAL BARRIERS

Women's attitudes toward obtaining early and adequate prenatal care are influenced by a number of factors. Unplanned or unwanted pregnancies pose psychological barriers to the seeking of care; these can be reduced by ensuring the accessibility of family planning services within the health care system. Resistance to seeking needed care may also derive from the expectant mother's lack of peer support and an appropriate role model, a barrier which has been reduced since 1985 through the **Resource Mothers** program that trains women from the community to provide support services to adolescents who are pregnant.

Other factors that influence women's attitudes include conflicts between providers' service hours and other high priority activities such as school or work, the convenience of transportation, and the relative affordability to low income women of out-of-pocket costs for care or transportation. These factors may result in significant attitudinal barriers because they force the woman to make difficult choices about the use of available time or money. The impact of these barriers can be reduced by changing various policies and practices of providers and third-party payors, such as extending case management and other services in conjunction with the **BabyCare** program.

RECOMMENDATIONS

III. In order to enhance the system's policies and practices that have a positive effect on women's attitudes toward obtaining prenatal care, the Virginia Health Planning Board recommends that the Governor and the Virginia General Assembly:

A. support funding needed to provide the manpower necessary to implement initiatives such as case management for high risk women;

B. support funding to expand programs providing counseling and support to adolescents;

C. support other related health programs such as family planning and family life education;

D. encourage volunteerism by such means as providing for the inclusion of volunteer activity under agencies' liability policies.

PUBLIC AWARENESS

A pregnant woman may fail to seek and obtain early prenatal care because she is unaware of its importance in obtaining a good pregnancy outcome. Not only potential mothers, but also persons who influence them, need broader, more effective exposure to the benefits of early and adequate prenatal care. The Department of Health has a traditional role in prevention and health promotion. Other health prevention and promotion programs involve both the public and private sectors, such as the **Beautiful Babies** project sponsored by the March of Dimes, WRC-TV4, and Blue Cross/Blue Shield of the National Capitol Area and Richmond City Health Department's **Healthy Futures** program. A policy statement by the Virginia General Assembly would foster renewed public awareness of efforts needed within both the private and public sectors.

RECOMMENDATIONS

IV. In order to increase public awareness of the importance of early prenatal care, the Virginia Health Planning Board recommends that the Governor and the Virginia General Assembly:

A. support funding to extend existing public education and information programs, such as the Beautiful Babies program, especially to localities with high infant mortality and low birth weight rates;

B. adopt a joint resolution to endorse formally those activities, both public and private, that promote the adoption of early prenatal care by and for all pregnant women, regardless of individual circumstances and to call for the removal of all barriers to care.

INTRODUCTION

Virginia is experiencing a growing crisis in its maternity care system. Accessing care early in pregnancy is becoming increasingly difficult for poor women, for uninsured women, and for women in rural localities and inner cities. Prenatal care is strongly related to birth outcomes. A study by the Institute of Medicine is representative of many reports documenting that mothers who receive prenatal care have better outcomes than those who do not. [6]

Virginia's infant mortality rate during the decades of the sixties and seventies was higher than that of the nation. During the eighties, a number of significant efforts to ensure better pregnancy outcomes and healthier children have improved the infant mortality rate by 32 percent, bringing it to 10.4 infant deaths per thousand live births in 1988, as compared to the national rate of 10.0 in 1987. This improvement has not been evenly distributed geographically and socioeconomically, and the differences are associated with variations in the population's access to obstetrical care.

The Virginia General Assembly has become aware that increasing numbers of primary care physicians have reduced or discontinued their obstetrical practices. The impact of this change is greatest in areas of the Commonwealth that were already medically underserved, especially affecting indigent and Medicaid populations. Twenty-one percent of the population of the Commonwealth reside in medically underserved areas, but 92% of the graduates of Virginia's obstetrical residency programs entered practice in the metropolitan areas that are not underserved. The 1989 General Assembly passed SJR 168 charging the Virginia Health Planning Board with examining the question of access to obstetrical care. This report to the 1990 General Assembly, supported by the Medical Society of Virginia's survey of obstetrician and family practice physicians' perspectives regarding access to obstetrical care, considers the causes of decreasing access to obstetrical care and identifies ways to manage the problem.

The study was staffed by the Virginia Department of Health, with participation from representatives of the Virginia Perinatal Association; the Medical Society of Virginia, the State Perinatal Services Advisory Board, the Virginia Hospital Association, the Virginia Poverty Law Center, the Nurses Association of the American College of Obstetricians & Gynecologists, the Virginia Primary Care Association, the Virginia Obstetrical and Gynecological Society, the Department of Medical Assistance Services, the Virginia Nurses Association, the State Corporation Commission's Bureau of Insurance, the Virginia Department of Volunteerism, the March of Dimes, and Blue Cross/Blue Shield.

DESCRIPTION OF THE OBSTETRICAL POPULATION

In 1987, 90,314 births occurred to Virginia residents. Of these births, approximately 9% were to teenage mothers; 61% were to mothers between the ages of 20 and 29; the remaining 30% were to mothers over the age of 30. Twenty-one

percent of the mothers had only elementary school or partial high school educations, 39% were high school graduates, and 40% had one or more years of college.

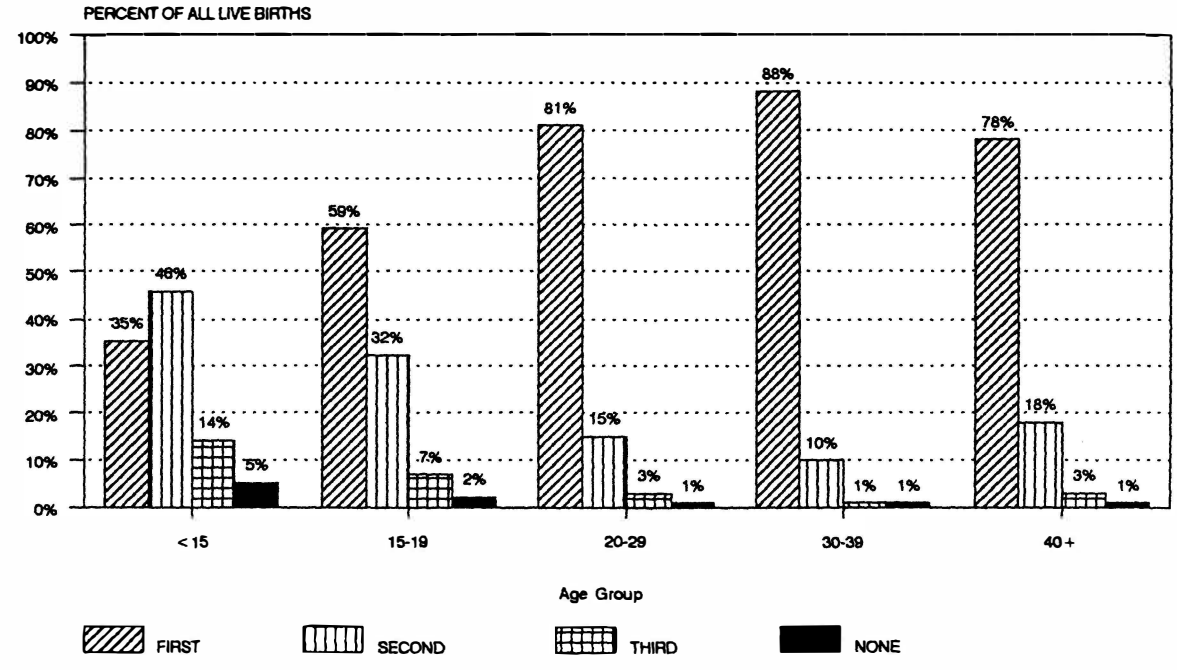
Eighty percent of the mothers experiencing live births began prenatal care in the first trimester of pregnancy. Sixteen percent reported beginning care in the second trimester, another three percent in the third, and about one percent received no prenatal care. Since 1983, the proportion receiving first trimester care has remained about eighty percent. Figures 1 and 2 show the differences in the trimester care began, by age and educational status. Adolescents and individuals who do not complete high school clearly begin care significantly later than others. They are over represented in the group that receives no prenatal care. Efforts to improve Virginia's proportion of mothers receiving earlier prenatal care might have the best results if they are targeted toward adolescents, high school students and dropouts.

As discussed in *Virginia Perinatal Health*, mothers who receive no prenatal care, while small in number across the Commonwealth, are clearly those suffering the poorest outcomes. In 1987, the number of women receiving no prenatal care in Virginia was 874 out of a total of 90,314 births. These women experienced about 60 infant deaths.[18] **This is a rate nearly seven times as great as for mothers who received prenatal care.** Had their rate been the same as that of mothers who received prenatal care, 50 infant deaths could have been avoided. This alone would have brought Virginia's infant mortality rate (infant deaths per 1000 live births) to less than 9.5 infant deaths per 1,000 live births in 1987.

Figure 1

PRENATAL CARE - BY MOTHER'S AGE

TRIMESTER CARE BEGAN - VIRGINIA 1983-87



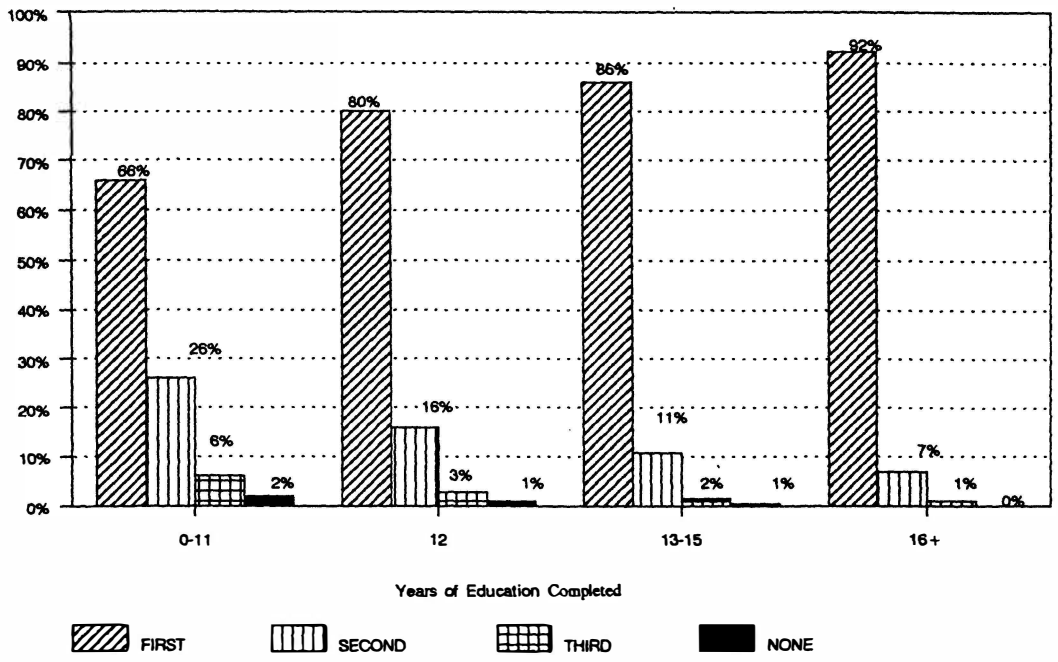
Source: Center for Health Statistics, VDH

Figure 2

PRENATAL CARE - BY EDUCATION

TRIMESTER CARE BEGAN - VIRGINIA 1983-87

PERCENT OF ALL LIVE BIRTHS - VIRGINIA 1983-87

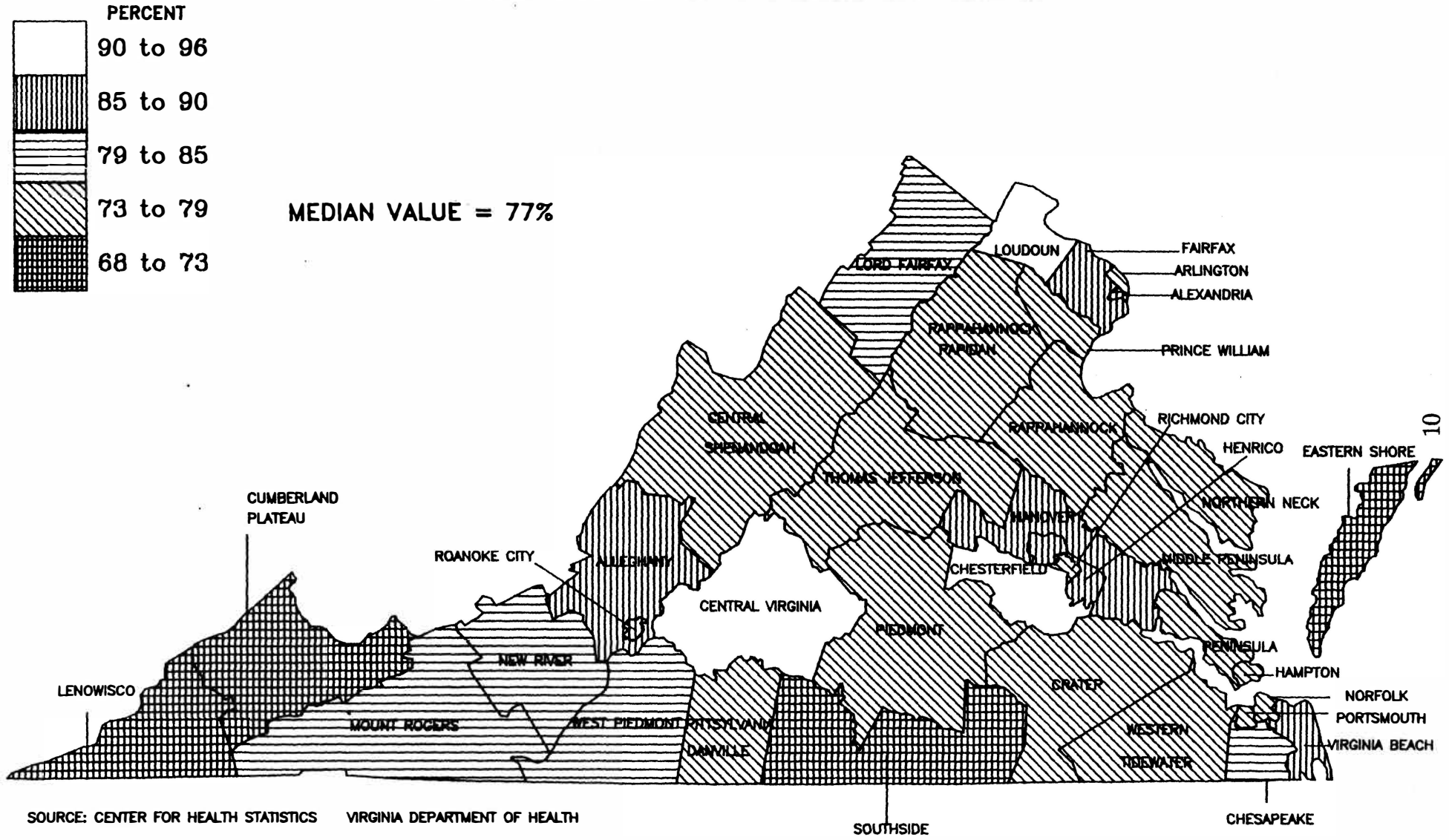


Source: Center for Health Statistics, VDH

On the following pages, figures 3 and 4 illustrate the health districts with the highest percentages of mothers entering care early and those with the highest percentage of mothers receiving late or no prenatal care. The geographic distribution of late care shows a correlation with the distribution of high infant mortality and low birth weight rates. Figures 5 and 6 indicate how Virginia's infant mortality and low birth weight rates vary by district. Rural districts such as Cumberland Plateau, Piedmont, Southside, and Eastern Shore as well as urban districts with high poverty like Norfolk, Portsmouth, Richmond and Alexandria are characterized by both delayed access to care and poor pregnancy outcomes. Figure 7 provides a perspective on the absolute numbers rather than rates. Some localities have both high rates and dense populations resulting in significant numbers of unfavorable pregnancy outcomes. Figure 8 demonstrates the variance in infant mortality rates by demographic characteristics. The non-white rates are significantly above those of the white population. Figure 9 shows the regional variance in mortality rates.

Socioeconomic factors are significant because the cost of prenatal care is a major disincentive to seeking prenatal care. The degree to which cost affects the availability of care varies throughout the state. Mothers covered by private health insurance packages receive variable financial support, depending upon the particular insurance plan. The poorest mothers qualify for support through the Medicaid program. In some localities, physicians waive or reduce fees for

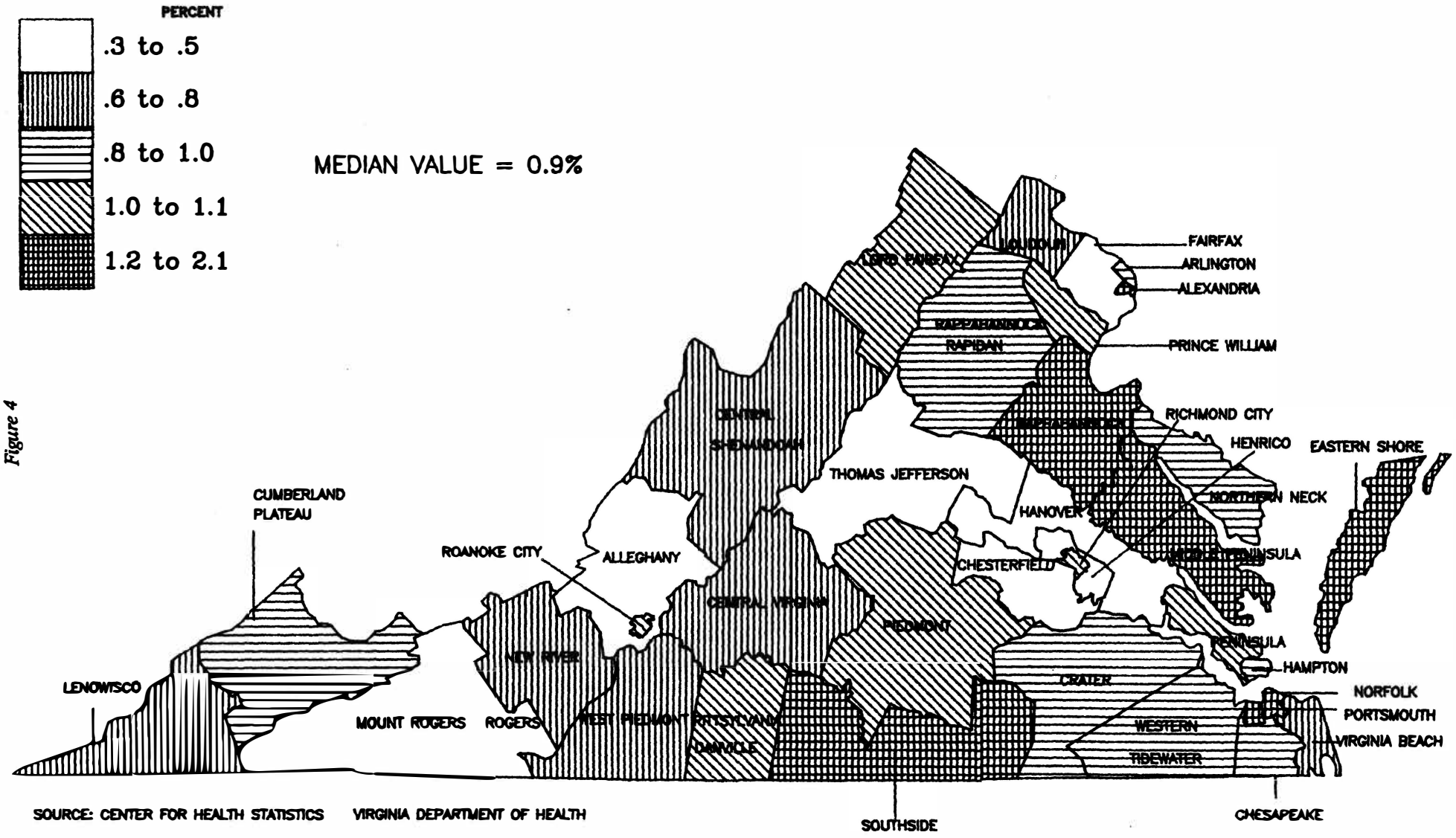
PERCENT OF BIRTHS IN WHICH PRENATAL CARE BEGAN IN FIRST TRIMESTER BY VIRGINIA HEALTH DISTRICTS 1983–87



SOURCE: CENTER FOR HEALTH STATISTICS VIRGINIA DEPARTMENT OF HEALTH

Figure 3

PERCENTAGE OF WOMEN RECEIVING NO PRENATAL CARE BEFORE DELIVERY BY VIRGINIA HEALTH DISTRICTS 1983–87



SOURCE: CENTER FOR HEALTH STATISTICS VIRGINIA DEPARTMENT OF HEALTH

Figure 4

INFANT MORTALITY PER 1000 LIVE BIRTHS BY VIRGINIA HEALTH DISTRICTS 1983-87

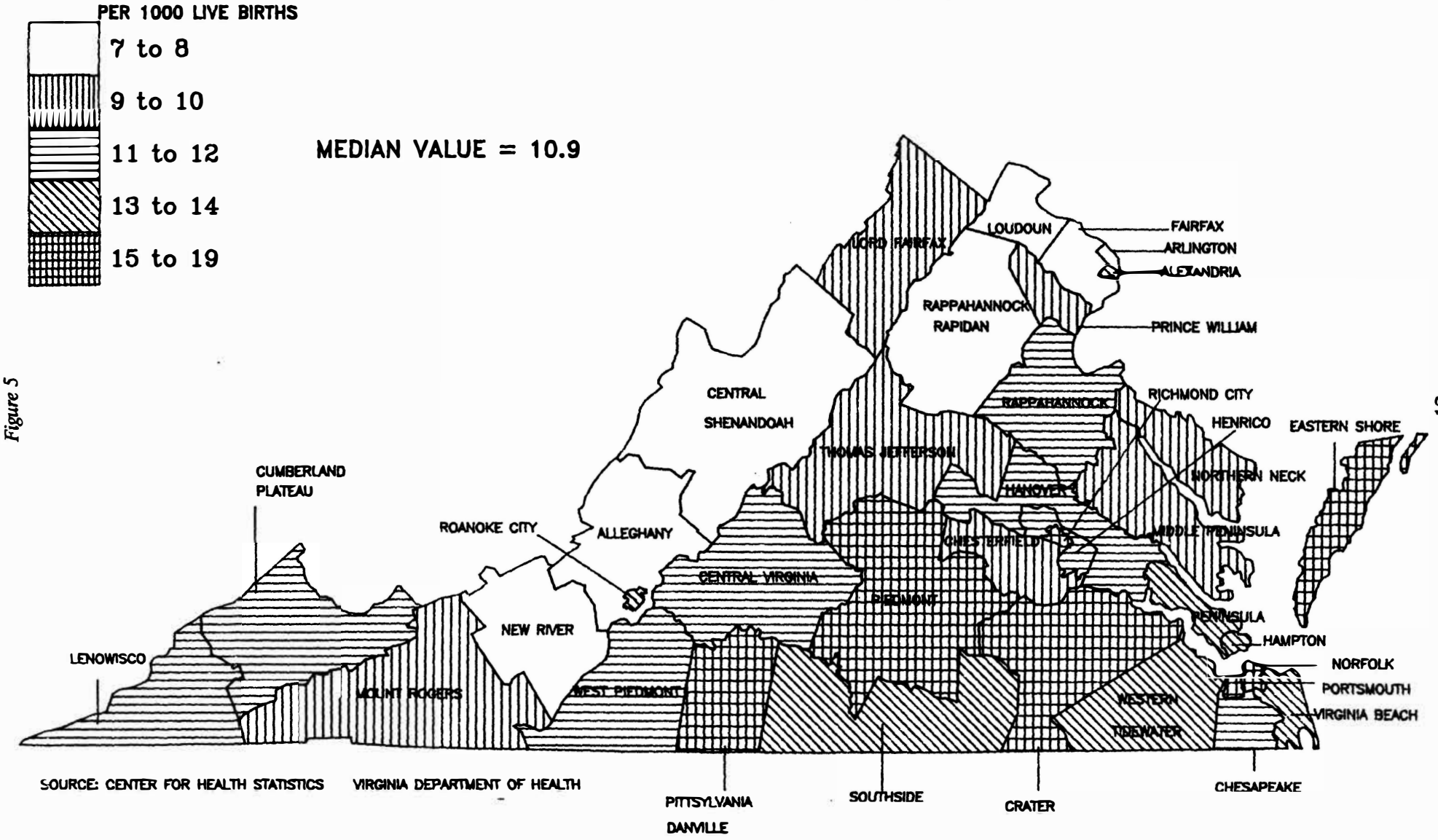
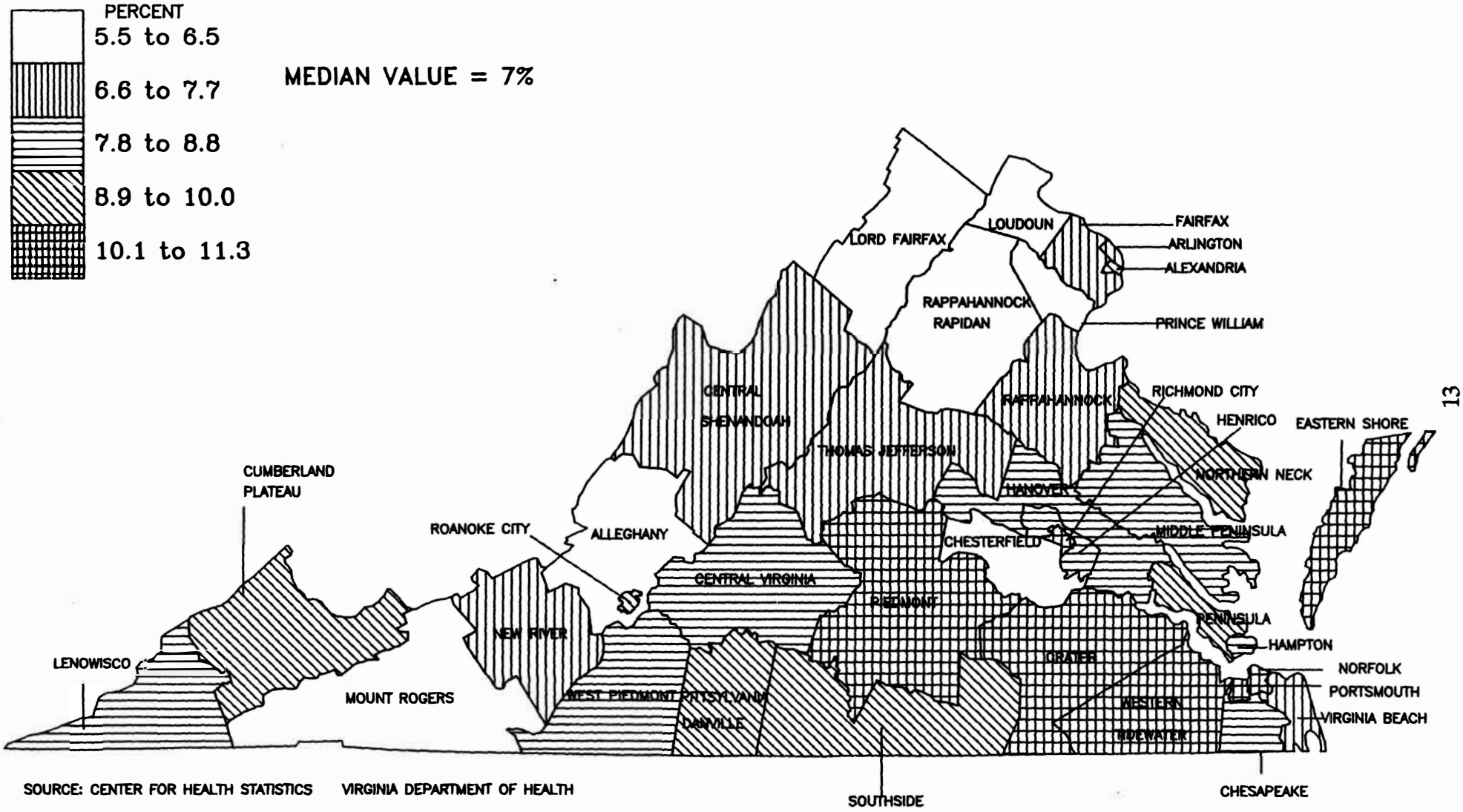


Figure 5

PERCENT LOW WEIGHT BIRTHS OF TOTAL LIVE BIRTHS BY VIRGINIA HEALTH DISTRICTS 1983-87



SOURCE: CENTER FOR HEALTH STATISTICS VIRGINIA DEPARTMENT OF HEALTH

(LOW WEIGHT BIRTHS ARE BIRTHS OF 2,500 GRAMS OR LESS)

Figure 6

TOTAL INFANT DEATHS
BY VIRGINIA HEALTH DISTRICTS 1983-87

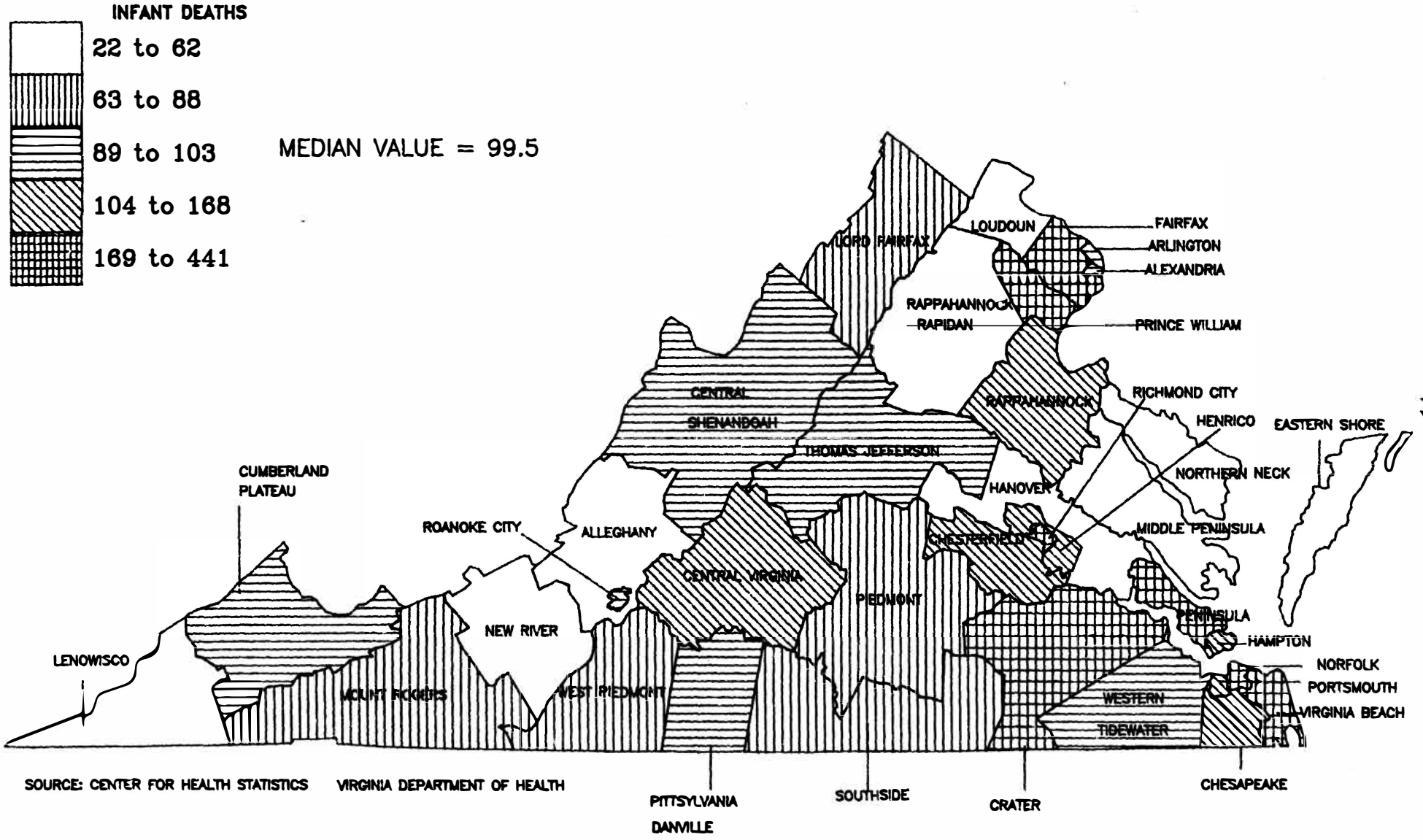
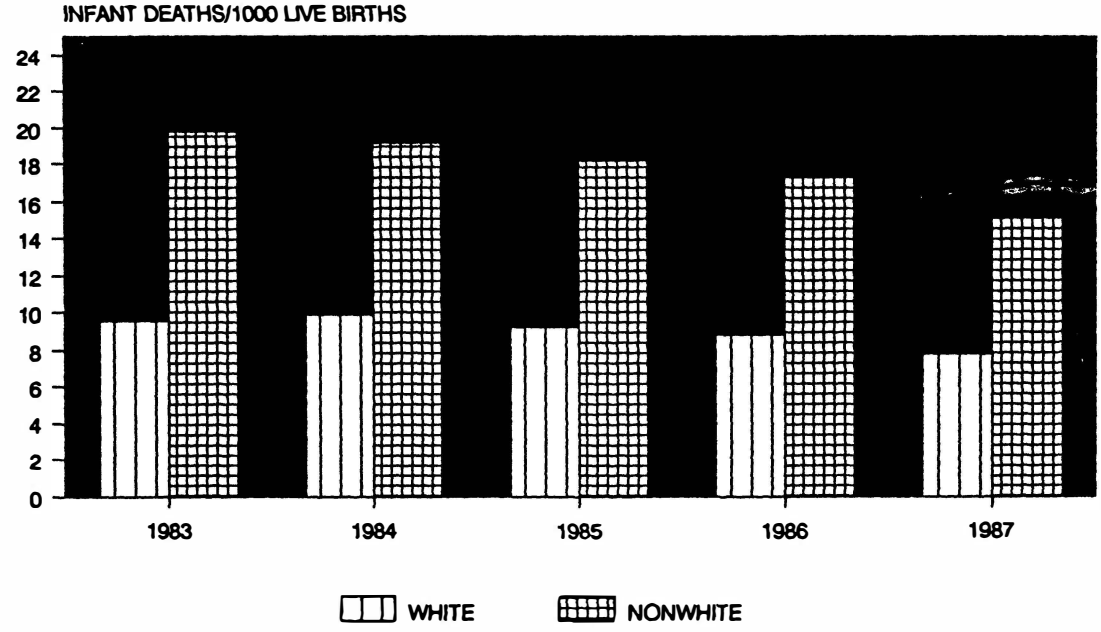


Figure 7

Figure 8

WHITE & NONWHITE INFANT MORTALITY RATES

VIRGINIA 1983-88

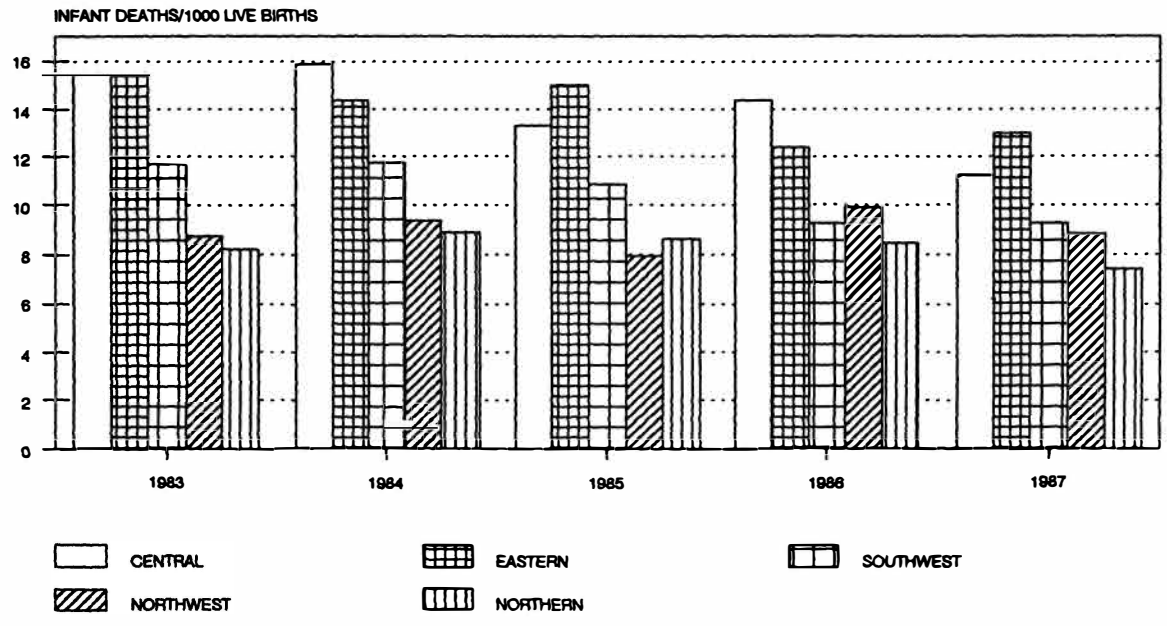


Source: Center for Health Statistics, VDH

Figure 9

INFANT MORTALITY RATES

BY VIRGINIA HEALTH REGIONS 1983-87



Source: Center for Health Statistics, VDH

mothers who are uninsured and not eligible for Medicaid assistance. Some women delay prenatal care visits due to an inability to meet the payment schedule.

There has been an increase in the total number of births statewide between 1985 and 1988. This has contributed to a significant increase in the Department of Health patient load to approximately 22,000 mothers during fiscal 1989. Despite the shifting of state/federal funding and staffing resources to the maternity program, the increased demand has strained the agency's ability to provide timely services. Several localities reported that waits of six to eight weeks for initial appointments are usual. Two years ago, the maximum waiting time was typically four weeks.

MATERNAL HEALTH INITIATIVES

During the decade of the 1980s, Virginia adopted many initiatives to enhance maternal health outcomes. In 1980 the General Assembly created a State Perinatal Services Advisory Board with members appointed by the Governor. The Board presented to the State Board of Health its first Statewide Perinatal Services Plan in May of 1983. That Plan identified seven perinatal regions and recognized certain hospitals as regional perinatal centers for serving high-risk mothers and infants, as well as providing education services to the medical community.

Studies that have taken place throughout this decade concerning Virginia's high infant mortality have had both wide ranging and specific recommendations, but a number of themes have emerged. There is general recognition that Medicaid recipient eligibility requirements and physician reimbursement policies have been too restrictive. Actions have been taken in recent years that have both increased the number of women eligible for Medicaid coverage and provided increases in physician reimbursement rates.

Other recommendations have identified the need for a coordinated system of transportation for indigent mothers to providers, a desire to assist physicians with rising malpractice premiums, and a growing concern for working women not covered through health insurance programs, either private or public. As a result of these recommendations, a number of programs have been created at the state and local level to begin solving some of the identified problems. The following summarizes a few of these programs and their activities.

- Grants from Maternal and Child Health Services block grant funds were provided to four **Preterm Birth Prevention** programs in *regional perinatal centers (Medical College of Virginia, Eastern Virginia Medical School, The University of Virginia Medical Center, and Roanoke Memorial Hospital) in cooperation with local health departments.* The programs identified pregnant women at high risk of early births and provided intensive services to them to minimize the risks of premature delivery. A risk assessment tool was proven reliable in identifying women likely to have early birth. Services included frequent prenatal visits, counselling, nutrition services, and social work support. Patients were hospitalized as

needed to reduce the risk of premature delivery (whereas hospitals typically do not admit patients for maternity care until the onset of labor). As a result of these programs, there were 186 fewer low birthweight births among the target populations in 1987 than might have otherwise occurred.[18] Efforts now are being made to develop modified versions of these highly successful projects in health departments throughout the state and to introduce the concept to private patients. A single nurse practitioner working with the Virginia Department of Health's Division of Maternal and Child Health is facilitating local health departments' incorporating preterm birth prevention into their prenatal care programs. The need to expand the concept has been recognized in at least one region within the Commonwealth. For these support services to be available statewide, the system must be funded and staffed. For example, an estimated $600,000 could enable the placement of nurse practitioners in 15 districts with high levels of need but not currently providing a preterm program. Since the average cost of intensive hospital care for a low birth weight infant exceeds $20,000, **the cost of adding these practitioners to the program would be recovered by the prevention of just two preterm births in each district per year.**

- **A Nutrition Intervention** Program operated through *local health departments* has provided intensive nutritional services to pregnant women who are underweight or not gaining adequate weight. Like the Preterm Birth Prevention projects, the nutrition program is very successful. A controlled study demonstrated effectiveness in increasing maternal weight gain and infant birthweight and in reducing low birthweight births by about 50 percent. Analysis indicated there were 65 fewer low weight births among early program participants than otherwise would have been expected. [18]

- Virginia initiated the **BabyCare** program in July, 1988 to expand *Medicaid* eligibility to women at or below 100% of the federal poverty level and to provide care coordination and support services for high risk pregnant women and children up to age two. A care coordinator oversees all aspects of targeted patients' care, making sure that supportive services such as nutrition education are provided as needed. As of July 1, 1989, over 5,000 mothers and infants had received BabyCare services. (DMAS) However, the access problem continues for many individuals. It is estimated that of all maternity patients who would be eligible for Medicaid, approximately 58% are actually enrolled. (VDH, from DMAS data) Among Health Department patients in fiscal year 1989, only 48% of obstetric patients who were likely to be eligible for Medicaid had been enrolled. (VDH Office of Community Health Services) Reasons for the small enrollment include patients' reluctance to acknowledge the need for financial help as well as the process of eligibility determination, including the effect of eligibility sites being physically separate from service sites. In order to facilitate eligibility determination, the Department of Social Services, the Department of Medical Assistance Services and the Department of Health have agreed to implement a pilot project placing Medicaid eligibility workers on-site in local health departments to take applications from patients as they arrive for health care services.

Localities planning to participate in the pilots include: Lynchburg, Danville, Pittsylvania, Chesterfield, Colonial Heights and Portsmouth. This is one effort to improve financial access by integrating the eligibility process among agencies providing services. Additional funding and staff resources are being requested to expand the BabyCare program to meet existing needs, including statewide on-site eligiblility determination and care coordination.

• The **Resource Mothers** program was initiated in 1985 by the *Virginia Task Force on Infant Mortality*. Women from the community are recruited and trained to support adolescents who are pregnant. Present localities partipating in the Resource Mothers program include Richmond, Newport News, Norfolk, Abingdon, Fairfax County, Scott County, Giles and Pulaski counties. The resource mothers encourage prenatal care, provide basic health advice, and are available to assist with transportation and other problems. They assist in securing community services, including education. The results include increased birthweight, reduction in risk behaviors, increased educational achievements, improved nutrition, and decreased infant mortality among adolescents participating in the program. Participants experienced a low birthweight rate of 5.9% compared with 10.9% for all adolescents in the communities where the Resource Mothers programs are based. (VDH)

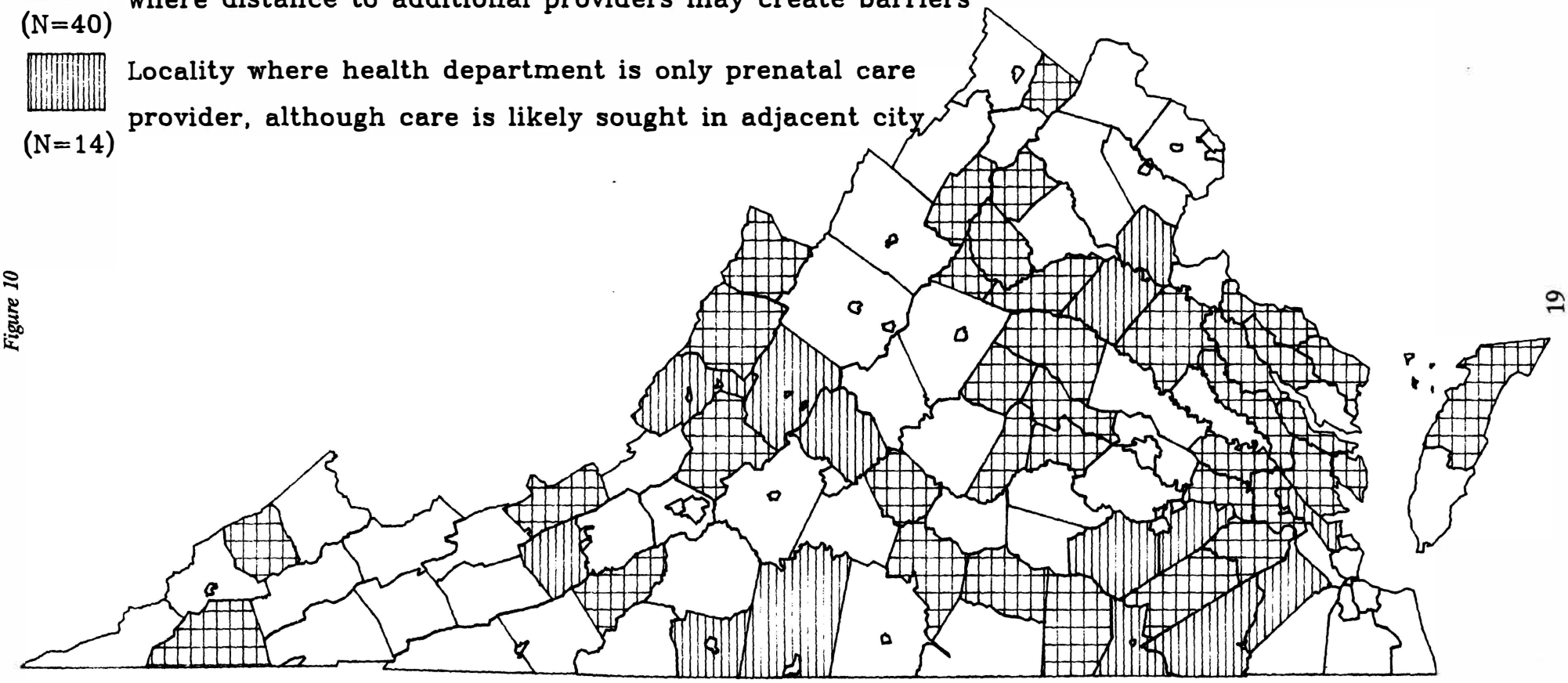
• Local programs have been initiated and supported by both the public and private sector. The **Beautiful Babies** project is sponsored in the Northern Virginia area by the *March of Dimes, WRC-TV4 and Blue Cross/Blue Shield of the National Capital Area*. The focus of the program is community health education. Health care literature is distributed, including coupon books for discounts on products and services. Each coupon requires physician validation and thus provides an incentive for early and continuing prenatal care. Initial program evaluation indicates that the program is cost effective. Program participants showed improved birth outcomes as measured by shorter hospital stays for the infants than were occurring prior to the program. *Richmond City Health Department* has a **Healthy Futures** program with a similar approach to encouraging prenatal care. Medicaid funding has been approved to extend such programs to targeted areas around the Commonwealth.

• *Virginia Polytechnic Institute and State University* sponsors the **"Expanded Food and Nutrition Education"** program through its extension service. This supplement to the Food Stamp program trains indigenous health care workers to give nutrition education and information to low income individuals and families. Pregnant adolescents are a significant part of the targeted population. The program currently serves 21 localities, primarily rural counties. More widespread distribution of this type program could increase the awareness of the importance of prenatal health care.

LOCALITIES WHERE HEALTH DEPARTMENTS ARE ONLY LOCATION OF PRENATAL CARE FOR MEDICAID RECIPIENTS – 1988*

Locality where health department is only provider and where distance to additional providers may create barriers (N=40)

Locality where health department is only prenatal care provider, although care is likely sought in adjacent city (N=14)



*Based upon localities where there were no providers other than the health department receiving Medicaid reimbursement for prenatal care services.

Source: Dept. Of Medical Assistance Services Data

Figure 10

DISTRIBUTION OF VIRGINIA OBSTETRICIANS AND GYNECOLOGISTS – 1989
SHOWING PRACTICE LOCATIONS IN RELATION TO MEDICALLY UNDERSERVED AREAS

1 Dot = 1 Ob–Gyn Placed randomly within the physicians' practice location

Underserved Locality

Sub–unit of Locality is Underserved

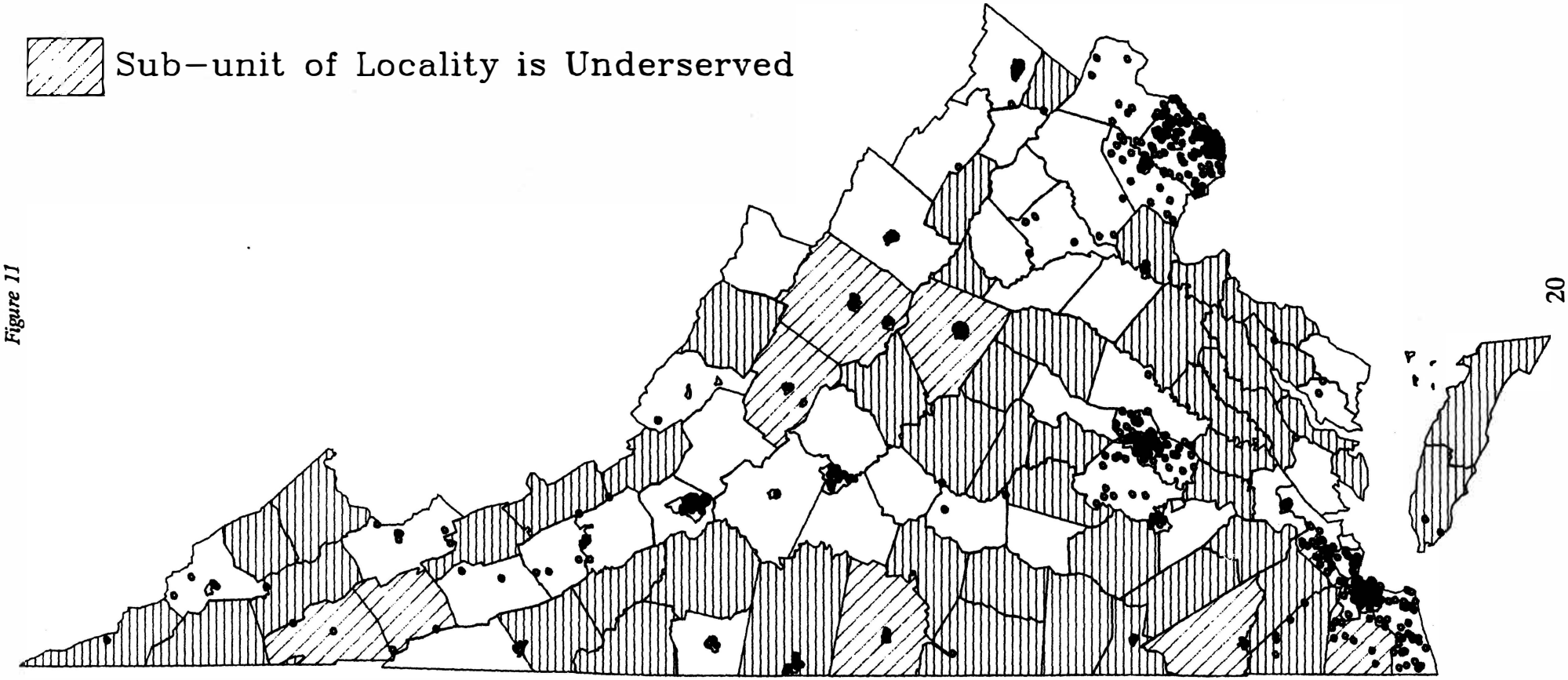


Figure 11

Source: Va. Department of Health, Division of Health Planning

FAMILY AND GENERAL PRACTITIONERS PERFORMING ONE OR MORE MEDICAID DELIVERIES DURING 1988; BY LOCATION, SHOWING MEDICALLY UNDERSERVED AREAS

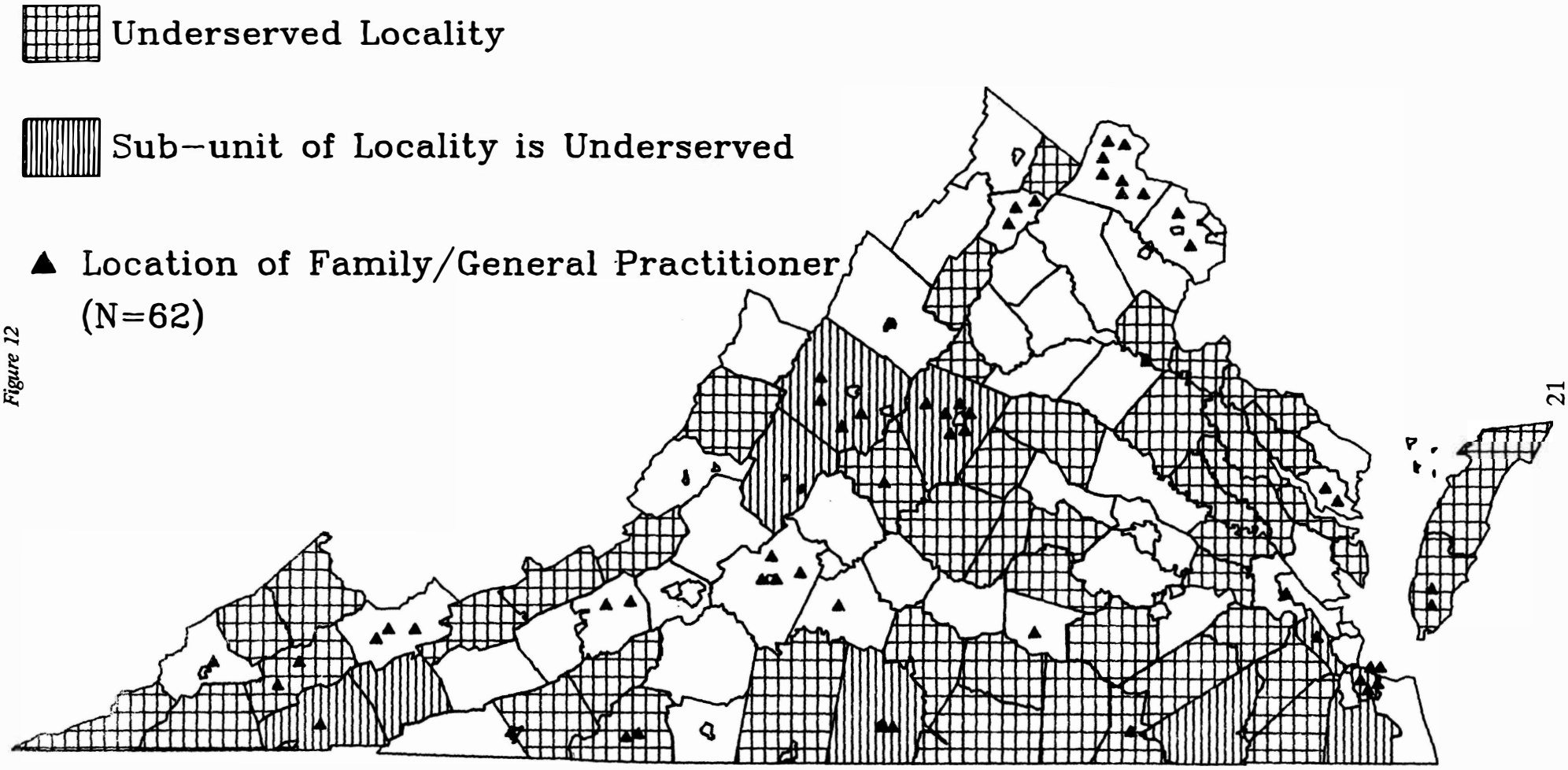


Figure 12

Source: Dept. of Medical Assistance Services Data,
Physician Specialty – Medical Society of Virginia

FACTORS IN THE PROBLEM

The problem of access to obstetrical care is described in four major areas:

- *maldistribution of providers of care,*
- *financial barriers,*
- *system/attitudinal barriers,*
- *lack of public awareness of the problem.*

MALDISTRIBUTION OF PROVIDERS

The maternity population's opportunity to choose from available services varies considerably across the state and tends to be related to population density. According to the Department of Health's Division of Health Planning, 66 counties and cities are wholly or partially designated by the federal government as Medically Underserved Areas. These are typically isolated, rural areas such as are found in the Eastern Shore, Northern Neck, Middle Peninsula, Crater, Cumberland Plateau, and Lenowisco health districts. As shown in Figure 10, the local health department is the coordinator of prenatal care for Medicaid recipients within many counties. (DMAS) Approximately 22,000 women received prenatal care from the Virginia Department of Health in its prenatal clinics during fiscal 1989. (VDH, Community Health Services)

All three medical schools in Virginia offer obstetrics/gynecology residency programs; however, their graduates rarely choose to practice in Virginia's Medically Underserved Areas. Of the physicians completing residency training between 1978 and 1987, only 48% remained in Virginia. Of those not leaving the state, 92% now practice in metropolitan areas.

Figure 11 illustrates how the practice locations of the approximately six hundred fifteen private obstetrician/gynecologists throughout the state generally fall outside the designated Medically Underserved Areas; those practicing within the Northern Virginia, Richmond, and Tidewater areas represent 70 percent of the total. Figure 12 shows a similar distribution pattern for the sixty-two family practice physicians who were reimbursed for delivering Medicaid patients in 1988.

In June of 1989, District Directors of the Virginia Department of Health reported their assessment of the community need for primary health care, including obstetrical care. The aggregate of the informal survey's data reflects a significant problem in the availability and accessibility of care for the medically indigent. Six of the 36 Health Districts reported that obstetricians/gynecologists in their area were not accepting new Medicaid patients, and an additional nine reported that area physicians were not accepting indigent patients. Physicians indicating that they accept Medicaid obstetrical patients may do so on a limited basis, such as acceptance by referral from other physicians.(Community Health Services, VDH) The Medical Society of Virginia survey of obstetricians and family practice physicians indicated that "80% of the responding obstetricians had accepted Medicaid patients at some point in their careers but that currently, only 63% participate in the Medicaid program". In addition, approximately 45% of obstetricians are currently taking new Medicaid patients, and of those taking new Medicaid patients, over one half are

restricting the number of Medicaid patients that they will see. Survey respondents identified the three most effective changes that they felt could induce obstetricians to accept, or accept more, Medicaid patients: 1) increased reimbursement 2) less paperwork 3) financial assistance with malpractice premiums.[11]

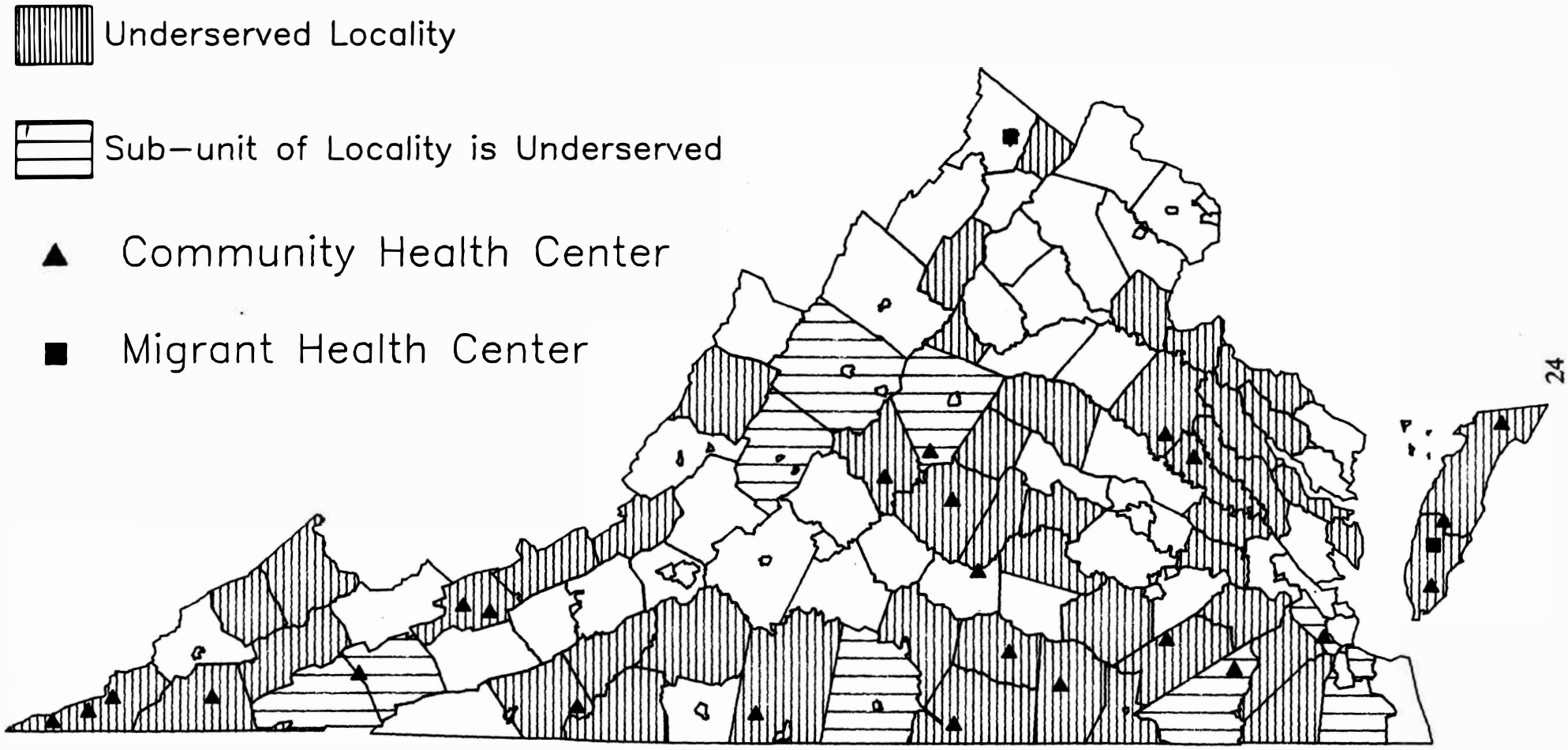
The location of Community Health Centers providing prenatal care is shown in Figure 13. These federally funded primary care centers serve indigent patients in approximately one half of Virginia's Medically Underserved Areas. Patients pay for services on a sliding scale based on income and family size. In 1988 about 42% of all health center patients were uninsured. Approximately 26% of women aged 15-44 in areas with Community Health Centers received care through the centers. The major purpose for which health centers were organized was to increase the accessibility of health care. In order to provide perinatal care, the centers have used a variety of approaches to the delivery of obstetrical services. No one approach is necessarily more effective than the others; the choice depends on local circumstances. Examples include:

1. Employing full time obstetricians to work either in the health center or at the hospital site.
2. Employing full time obstetricians co-located with a private obstetrical practice in the town where the hospital is located.
3. Contracting with existing private obstetricians to provide prenatal care for center patients at the center with individual payment arrangements for delivery.
4. Providing or renting office space in the health center to private obstetricians in return for assurances of care to sliding fee patients.
5. Employing staff family physicians to provide prenatal care and delivery services to patients.
6. Employing staff family physicians plus nurse practitioners or physician assistants to provide prenatal care and referring delivery services to local private obstetricians.

In providing obstetrical services, community health centers face two difficulties. The first is recruiting obstetricians: only seven of 27 health center sites have an obstetrician working at least part time on-site; the primary problem at sites with full-time obstetricians is the lack of back-up arrangements for physicians to share night and weekend call. The second difficulty is payment for hospital charges for uninsured patients. Even though payment for physician charges can be waived through the sliding fee schedule, patients remain responsible for hospital charges. Characteristically, the uninsured have limited resources and much of their hospital care is uncompensated. Maintaining positive relations with the local hospital while referring the uninsured is a constant issue of concern for health center physicians. (Virginia Primary Care Association)

Hospitals providing delivery services are currently available in all health districts except Middle Penisula but are not necessarily found in every county; see Figure 14. The appendix lists the locations of hospitals with obstetrical services. Since 1985, four hospitals in Virginia have closed their obstetrical units. There are now 70 obstetrical units ranging in size from two to 100 beds.

VIRGINIA MEDICALLY UNDERSERVED AREAS
LOCATION OF COMMUNITY/MIGRANT HEALTH CENTERS



Distribution of Licensed Obstetrical Hospital Beds By Location of Hospital 1988

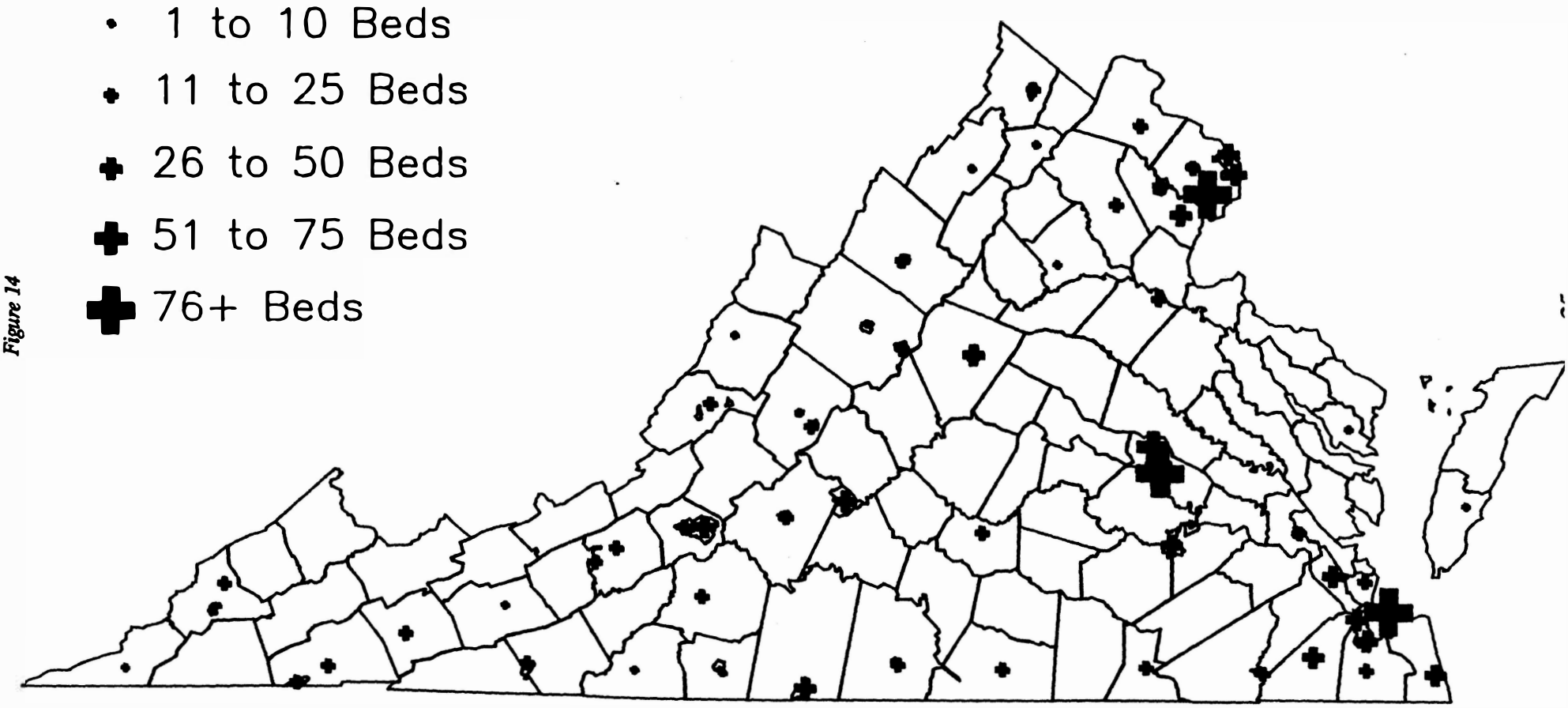


Figure 14

Source: Va. Dept. for Health, Center for Health Statistics

Demographic trends show the access problem will become worse without changes in the system. The total number of births in the Commonwealth has increased steadily by one to four percent per year since 1985. Nearly fifty additional obstetricians would be needed just to manage this period's overall increase, and there has in fact been a net increase of approximately fifty obstetricians since 1985; however, they have generally failed to locate their practices in the areas with greatest need. Population and economic growth is occurring rapidly within areas that obstetricians already overwhelmingly favor in locating their practices, such as the crescent from Northern Virginia through the Richmond area into Tidewater. They favor such areas as a natural result of economic forces: in order to perform enough deliveries to support a practice, obstetricians/gynecologists usually practice in densely populated rather than rural areas.[1; 20] Slower population growth in other, predominantly rural, areas has not been sufficient to attract a corresponding increase in the local supply of physicians and therefore has resulted in a relative decline in access to care within those areas.

Nationwide, the vast majority of deliveries are performed by obstetricians, but 20% are provided by family physicians and general practitioners and another 2% by certified nurse-midwives.[6, p.24] Limited data from the Virginia Medicaid program indicate that a similar relationship likely exists in the Commonwealth, since family practice physicians perform approximately 17% of all Medicaid deliveries. (DMAS)

The Department of Health, through its *Five Point Plan for Increasing Primary Care* has presented methods to increase the physician recruitment and retention rates in medically underserved areas. The Department has submitted a budget addendum to:

- *enhance the medical scholarship program,*
- *introduce a loan repayment system funded by federal and state dollars to attract physicians completing residency programs,*
- *support centers providing primary care,*
- *increase the availability of such centers, and ...*
- *establish with federal funding a statewide area health education center program to provide health professions training and education in underserved areas.*

Nurse practitioners supplement the limited physician supply in certain areas of Virginia. According to Virginia's Department of Health Professions there are approximately 1,000 nurse practitioners (other than nurse anesthetists) licensed in Virginia, including those whose practice is inactive.

A nurse-midwifery program has been established in Lynchburg to provide obstetrical services to indigent patients. Virginia Baptist Hospital employs nurse midwives who function under protocols to offer both prenatal care and hospital services. Hospital staff physicians provide medical back-up, and the nurse midwives also function in health department clinics and other community settings. Patient acceptance has been enthusiastic. Obstetricians, while expressing some concern regarding the liability issue, have recognized the nurse midwives' contribution to care for indigent patients. (Hohler,

et al., "How One Community is Providing Obstetric Services to the Indigent Population" in [2])

The Lynchburg program is one of relatively few in Virginia in which nurse-midwives have hospital delivery privileges. Others are located in Woodstock, (Shenandoah County) and Hillsville (Carroll County). Nurse midwives also deliver patients in military facilities such as the Air Force's hospital located at Langley Field in Hampton.

There are a total of 53 licensed nurse midwives in Virginia, although only 8 are actively practicing; there are about 4,000 nationwide. (American College of Nurse Midwives, "Certified Nurse Midwives in Virginia" and "Statistics on Certified Nurse Midwives"in [2]) On a nurse per capita basis, Virginia therefore has about half the national average.

Local health department clinics provide obstetrical and other primary care services with nurse-midwives, nurse practitioners, and public health nurses working in collaboration with physicians. Approximately 80 certified nurse practitioners are employed by the Department of Health primarily in the Southwest, Eastern, and Central regions. Fairfax is planning to include nurse practitioners in its new "Affordable Health Care Program" to provide primary care services to the county's indigent population. In interviews conducted by the Department of Health, localities reporting the effective utilization of Certified Nurse Practitioners include Alexandria, Charlottesville, Galax, Carroll, Grayson, Dickenson, Russell, Buchanan, Tazewell, Chesapeake, Norfolk, Petersburg and Richmond. A recent report on nurse practitioners has identified the following as barriers affecting their practice:

1. lack of prescriptive and dispensing authority,
2. lack of signature authorization on health documents,
3. lack of physician availability for collaboration,
4. resistance to direct third party reimbursement,
5. limitations on patients' insurance coverage for preventive care,
6. difficulty obtaining hospital privileges, resistance to development of collaborative relationships with physicians, and cyclical periods of threatened lack of available medical liability insurance. [12]

The literature reports that nurse practitioners are effective within the scope of their practice. The Institute of Medicine contends: Certified nurse-midwives..."*have been shown to be particularly effective in managing the care of pregnant women who are at high risk of low birthweight because of social and economic factors. These health care providers tend to relate to their patients in a nonauthoritarian manner and to emphasize education, support, and patient satisfaction... The committee recommends that more reliance be placed on nurse-midwives...to increase access to prenatal care for hard-to-reach, often high-risk groups. Maternity programs designed to serve high-risk mothers should increase their use of these providers; and state laws should be supportive of nurse-midwifery practice and of collaborations between physicians and nurse-midwives/nurse practitioners*". [6, p.25]

In addition, the Office of Technology Assessment recommends the utilization of nurse midwives in extending obstetrical

care to underserved and socioeconomically high risk pregnant women and adolescents. It recognizes the potential cost effectiveness as well as the quality of care in this approach.[19]

At the request of the Secretary of Health and Human Resources, the Board of the Department of Health Professions has established a Task Force on the Practice of Nurse Practitioners in Virginia. Members include representatives of the Committee of the Joint Boards of Nursing and Medicine for the Certification of Nurse Practitioners, The Statewide Council on Infant Mortality, and Blue Cross/Blue Shield of Virginia. The Task Force will review problems in access and barriers to the full utilization of certified nurse practitioners and recommend changes in statute, regulation and policy to deal with these problems. An interim report is expected to be available by January, 1990.

Many states have increased the utilization of nurse practitioners by designating health centers as Rural Health Clinics. This federal designation requires the clinic to meet certain criteria, such as on-site availability of a practitioner 60% of the time the clinic is open. The clinic must be located within a Health Manpower Shortage Area, as designated by the federal government (see glossary). A Rural Health Clinic may receive reimbursement for Medicaid services on a predetermined cost basis rather than the traditional fee-for-service basis. This provision encourages the utilization of nurse practitioners since Medicaid does not reimburse Nurse Practitioner services directly. Virginia currently has two designated Rural Health Clinics, located in Nelson County and Lee County.

Other states, including Virginia during the early 1980s, experienced success with programs designed to increase the availability of nurse practitioners. West Virginia targets nurses who are practicing in rural areas and sponsors their education to become nurse practitioners or nurse midwives, with the condition they they commit to return to practice in the underserved area.

FINANCIAL BARRIERS

Within the populations of the Virginia counties that comprise the Medically Underserved Areas, the proportion of the population living in poverty is greater than in other areas of the state - one person out of six has income below the federal poverty level and one out of 14 is enrolled in the Medicaid program. In contrast, within the metropolitan areas of the state one person out of nine is in poverty and one out of 27 receives Medicaid services.

Blue Cross/Blue Shield of Virginia estimates that during the first half of 1989, the average physician charges for a routine obstetrical case (prenatal care with a normal delivery) ranged from $1,212 in the far Southwest to $2,161 in Northern Virginia. During that same period, Medicaid reimbursed physicians across the state for prenatal care and normal delivery services at $625 per delivery. (DMAS) Physicians report that the present reimbursement rates are inadequate to cover their costs in providing services to Medicaid eligible women. See Figure 15 for the estimated average charges for maternity care by physicians across the Commonwealth.

Figure 15

Average Charges For Total Obstetrical Care With A Normal Delivery (January to June of 1989):

- Northern Virginia – **$ 2,161**
- Other Urban Areas – *(includes Charlottesville, Petersburg, Richmond and Tidewater)* – **$ 1,531**
- Far Southwest Virginia – **$1,212**
- Remainder of State – **$1,378**

(Source: Blue Cross/Blue Shield of Virginia)

With a large percentage of residents within both rural and urban areas of the State living below poverty level and receiving Medicaid services, the number of physicians who accept Medicaid reimbursement becomes increasingly important. Local studies of this issue include the "Analysis of Infant Deaths Occurring to Richmond Residents in 1986." As shown in Figure 16, neighborhoods experienced marked differences in the number of infant deaths in Richmond. The correlation between poverty and the number of deaths suggests that access to care is a socioeconomic as well as a geographic phenomenon. The study's recommendations included improving insurance coverage of working women, developing strategies for high risk populations, and involving private physicians and the entire community in the effort. [14]

Of the obstetricians practicing in Virginia during 1988, only 52 percent delivered one or more babies whose mothers were covered by Medicaid, as shown in Figure 17. There is a wide variance of deliveries among these physicians, with about 38 percent delivering babies to fewer than ten women. (DMAS) Overall, obstetrician/gynecologists typically perform a range of 180-216 deliveries per year. (Virginia Obstetrical and Gynecological Society) Analysis of Department of Medical Assistance Services data indicates that approximately fourteen (14) percent of all Virginia physicians reimbursed for Medicaid deliveries are providing half of all Medicaid deliveries, based on providers who performed and were reimbursed for at least one Medicaid delivery in 1988. See figure 18 for a description of the distribution of Medicaid funded deliveries.

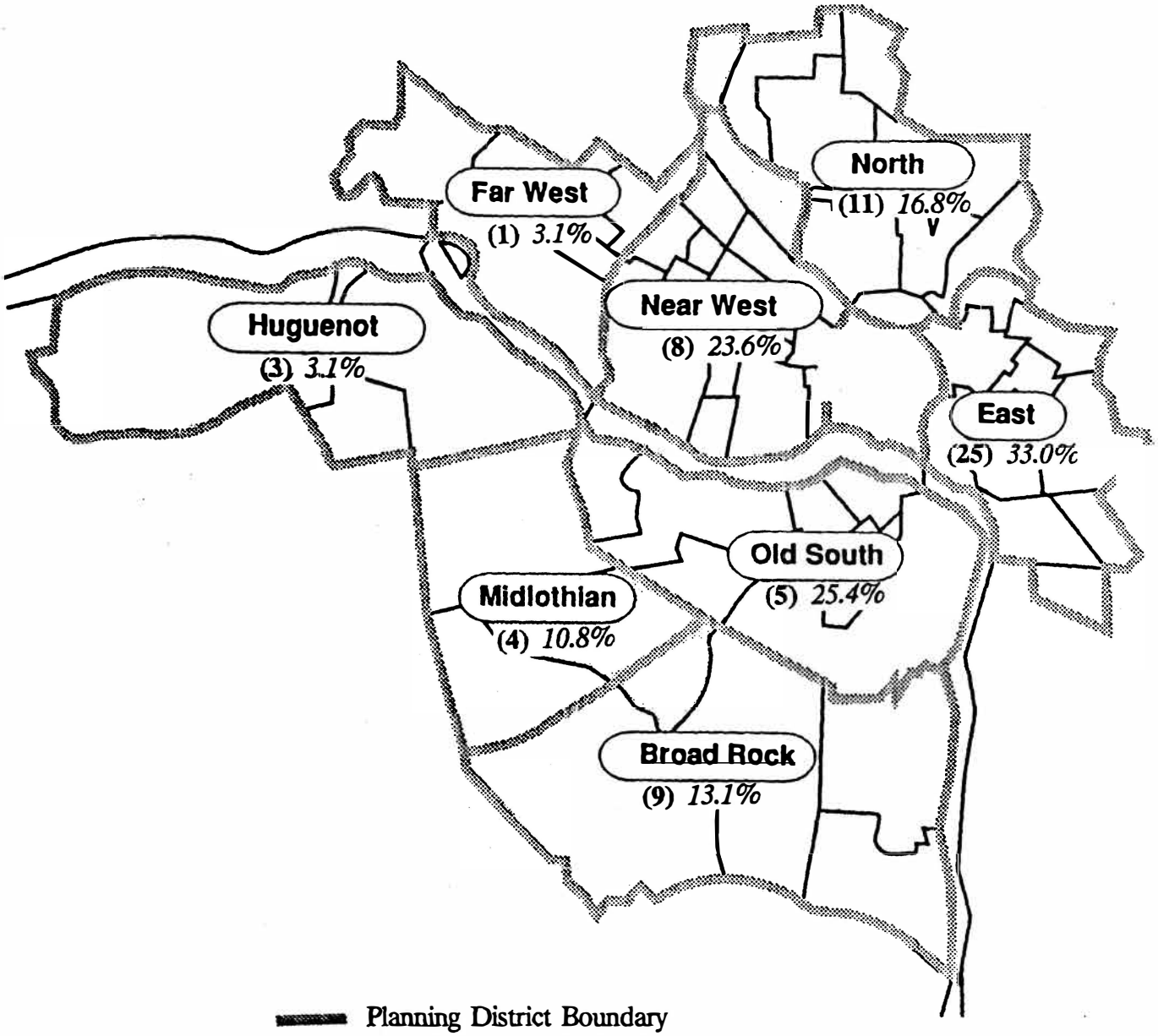
For the nation as a whole in 1985, 63 percent of obstetrician/gynecologists providing obstetrical care were serving Medicaid patients. For 44 percent of these physicians, Medicaid patients represented less than ten percent of their 1986 deliveries. Most of those with higher percents of Medicaid patients are in smaller communities.[3] Virginia's experience with obstetrician participation in the Medicaid program follows a similar pattern, as was shown in Figure 12. The percent of obstetricians performing ten or more Medicaid deliveries is greater in rural areas than in predominantly urban areas. (DMAS)

The procedure for establishing Medicaid reimbursement rates has traditionally contained no provisions for an automatic escalator to allow fees to keep pace with rising physicians' costs. Whereas Medicaid's reimbursement for obstetrical procedures was increased to the 25th percentile in 1986,[2] the value of that reimbursement fell to the tenth percentile of physician charges by the 1988 fiscal year as physicians' fees increased to keep pace with increased costs. The Department of

Figure 16

Number of Infant Deaths Occurring to Richmond Residents During 1986 By City Planning District Residence of the Mother

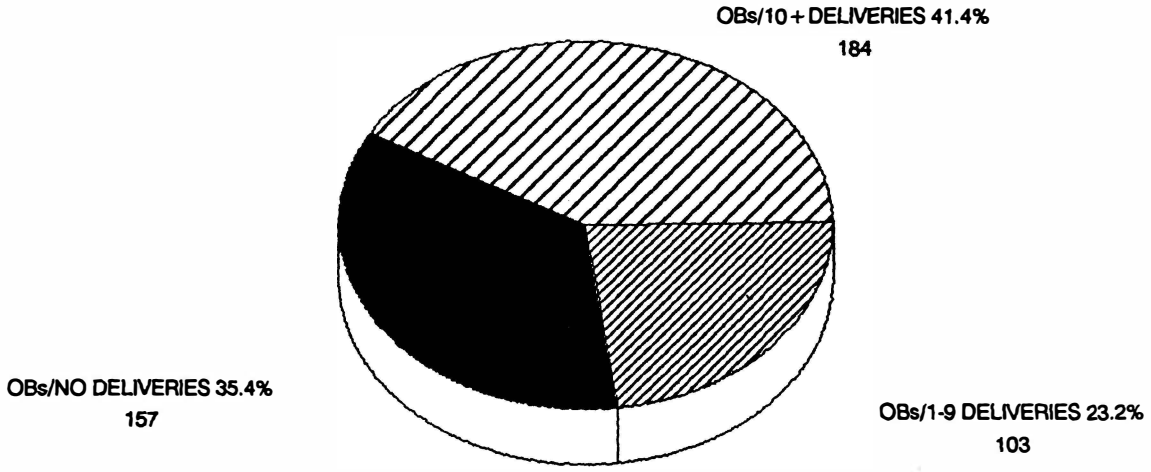
Number of Infant Deaths ( ), *Percent Population Below Poverty in 1980*



Source: Map: City of Richmond Department of Community Development
Data: Richmond City Health Department

Figure 17

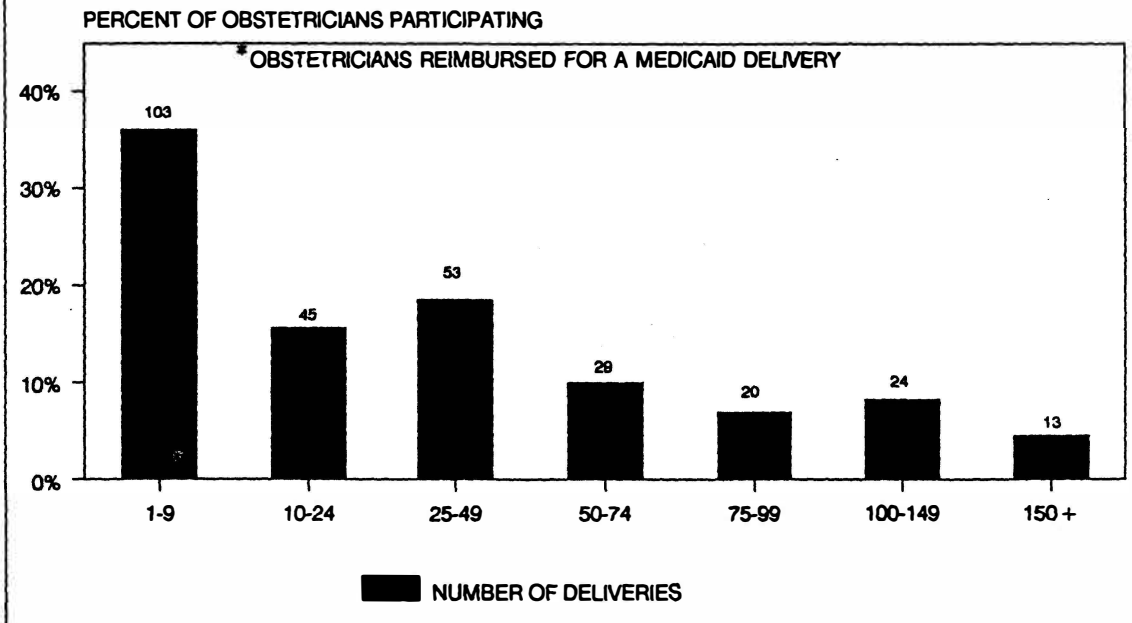
VIRGINIA OBSTETRICIANS REIMBURSED FOR MEDICAID DELIVERIES-1988



Source: Department of Medical Assistance Services; Medical Society of Virginia for Total Obstetricians

Figure 18

OBSTETRICIAN PARTICIPATION IN MEDICAID BY NUMBER OF DELIVERIES* - 1988 (N=287)



Source: Department of Medical Assistance Services

Medical Assistance Services has received approval from the General Assembly to increase reimbursement from the tenth percentile to the 15th percentile on January 1, 1990. The new rate for the total obstetrical care package (includes prenatal, delivery, and postpartum care) will be $930 for an uncomplicated case. The Department of Medical Assistance Services is requesting an additional increase to be effective July 1, 1990.

Medical Liability Insurance

Rising medical malpractice insurance costs have frequently been cited as a major contributing factor in the decision of obstetricians and family practice physicians to decrease or discontinue their obstetrical practice. From 1986 to 1987 malpractice premiums for obstetricians in Virginia increased by about 30 percent in the Northern Virginia region and by about 17 percent elsewhere; this was followed by a statewide increase of about 34 percent over the next year and a subsequent drop of about eight percent from 1988 to 1989; see Figures 19 and 20. A recent decision by the State Corporation Commission resulted in a premium decrease of 22.4 percent by one major insurer in 1989.

Based upon responses to a survey conducted by the Medical Society of Virginia, nearly one-third of the obstetricians and family practice physicians who have at some point in their careers practiced obstetrics have stopped practicing that specialty. The two reasons cited most often by physicians for giving up the practice of obstetrics are high medical liability insurance premiums, and the risk of a medical malpractice action. In addition, respondents to the Medical Society of Virginia survey indicated that *over one half* of the family practice physicians and obstetricians who currently provide obstetric services consider it *very likely that they will stop practicing obstetrics* sooner than they would ordinarily because of the risk of malpractice suits and/or high insurance premiums.[11]

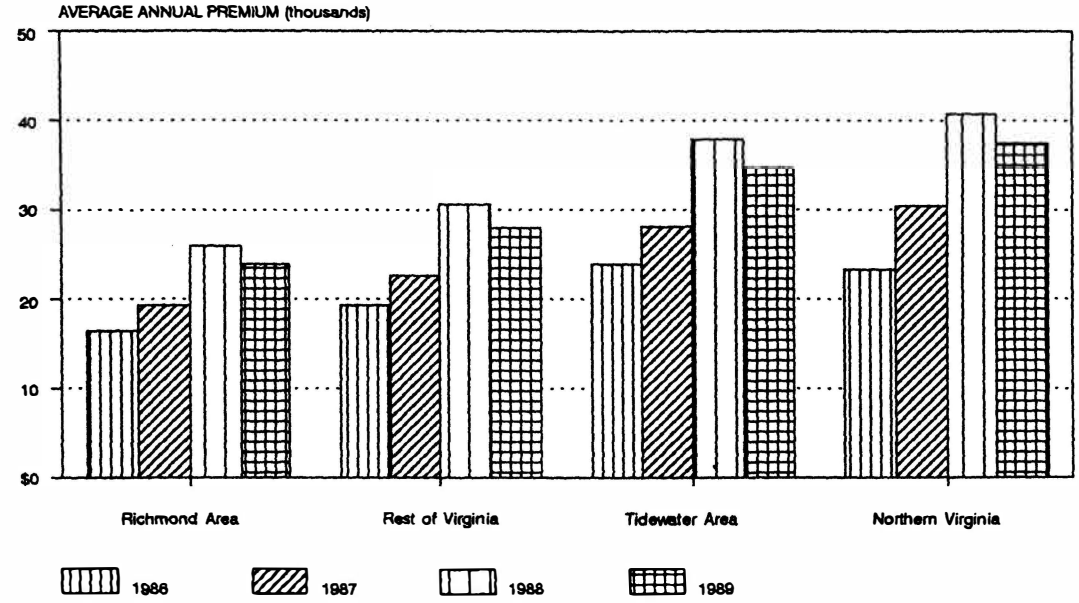
Changes in malpractice premiums are correlated with medical liability claims made against physicians. The aggregate totals in settlements and judgements against obstetricians markedly increased between 1985 and 1988, with the average judgements or settlements paid also increasing; see Figure 21. Figures 19 and 20 depict average medical liability insurance premiums for a standardized policy; the premium is generally highest in Northern Virginia and lowest in the Richmond area. (Virginia Department of Health survey of insurers, 1989) Individual physicians may pay higher rates in certain circumstances: to cover incidents occurring during a period of time prior to the current policy, termed "tail" coverage; or to purchase insurance from the Joint Underwriters Association when coverage is not available to the physician through the regular market.

A similar analysis of claims paid for family practice physicians is less clear but reinforces the premiums reported by family practice physicians. Since the annual number of deliveries performed by family practitioners is generally lower than that of obstetricians, the cost per delivery of obstetrical insurance is higher for family practitioners; the data indicates that a significant number have chosen to avoid that extra cost. For many of these, obstetrics likely represented a small share of their overall practice. A survey of major

Figure 19

MEDICAL LIABILITY INSURANCE PREMIUMS

OBSTETRICIANS/GYNECOLOGISTS - VIRGINIA

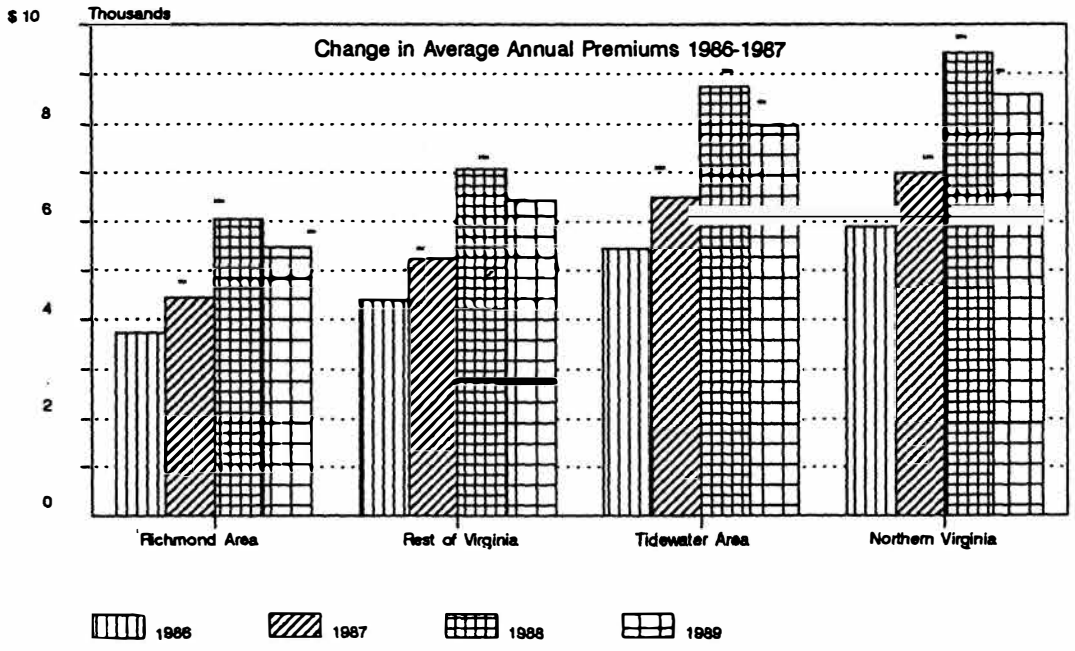


Source: Virginia Department of Health (VDH); Survey of Insurers

Figure 20

MEDICAL LIABILITY INSURANCE PREMIUMS

VIRGINIA FAMILY PRACTICE PHYSICIANS

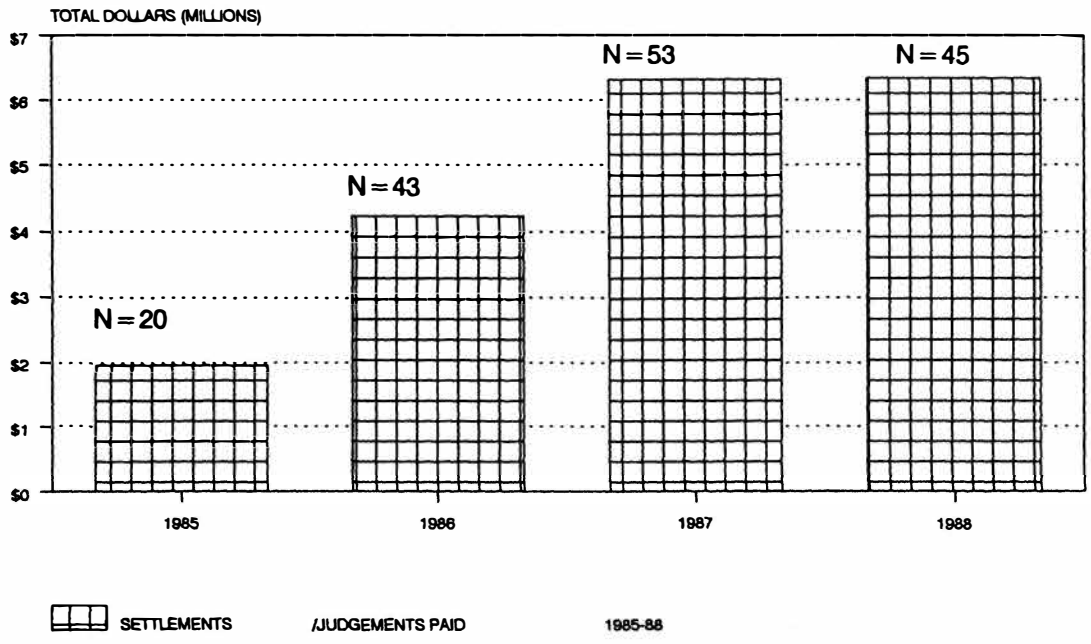


Source: Virginia Department of Health (VDH); 1989 Survey of Insurers

Figure 21

MEDICAL LIABILITY CLAIMS PAID

VIRGINIA OBSTETRICIANS-GYNECOLOGISTS



Source: State Corporation Commission

insurers indicates that in Virginia in 1986, a total of 154 family practice physicians were insured for obstetrical services; by 1988, there were only 85. (VDH Survey of Insurers, 1989) Approximately four percent of Virginia's family practice and general practitioners performed deliveries for Medicaid patients in 1988.(DMAS data and [1]) Family practice physicians accounted for approximately 5 percent of all Medicaid deliveries performed in 1988. Figure 12, as previously discussed, shows that most of these physicians are located in rural areas. (DMAS) Nationally, family practice physicians account for approximately two-thirds of the obstetrical care in rural areas.[5] The tendency of family practice physicians to discontinue obstetrical services therefore results in a disproportionate impact upon women in rural areas.

To deal with their physicians' medical liability problem, the North Carolina legislature enacted the Rural Obstetrical Care Incentive Program. The pilot program has awarded funding to 22 counties based upon a prioritization of obstetrical needs using the following criteria: **1)** no prenatal care or deliveries, **2)** private but no public obstetrical services, **3)** obstetrical care available in health departments but without a medical component, and **4)** demonstrated lack of obstetrical services by such measures as a rate of no prenatal care above the state average. Through awards to the counties, physicians agreeing to treat indigent prenatal patients received funding to supplement their cost of medical liability insurance. An initial $240,000 was distributed among 54 physicians in 1989, 31 of whom were family practice physicians. The average amount of the supplement was $6,500 per

obstetrician and $4,460 per family practice physician. Each was expected to provide both prenatal care and delivery services as well as to participate in the county's required plan for indigent patients. The program has been in place for only one year, but has been found to influence physicians to remain within these counties. North Carolina is presently establishing a commission to review birth related neurological injuries, as another way to decrease the medical liability impact upon physicians. (Richard Nugent, M.D., Division of Maternal Child Health, N.C. Department of Health)

Nurse practitioners, including nurse-midwives, have reported difficulties in securing medical liability insurance coverage. The cost of their insurance premiums approaches $800 per year for individuals providing obstetrical care. This premium is for $1,000,000 per incident and $1,000,000 aggregate coverage, and the policy provides only for incidents occurring during the time coverage is maintained. In order to cover claims from a previous time period, the nurse practitioner must pay an additional $6,562 for one retroactive year to $12,266 for four retroactive years. This amount, termed "tail" coverage, represents a significant proportion of a nurse practitioner's income. In addition, insurers have demonstrated a cyclic patte rn of threatening to discontinue coverage for this group. (Judy Collins, Task Force on the Practice of Nurse Practitioners)

In an effort to control rising claims awards, Virginia has been a forerunner among states in providing a statutory limit of one million dollars on medical liability awards. The constitutionality of that statute, however, is still being tested. During an appeal of the U.S. District Court's 1987 ruling that the limit is unconstitutional,the Virginia Supreme Court ruled (in 1989, on a different case) just the opposite. The U.s Court of Appeals for the Fourth Circuit has therefore requested the Virginia Supreme Court to respond to definitive questions clarifying the state's interpretation and application of the law before making a final decision. (office of the Virginia Attorney General)

Virginia is also one of two states with a "good Samaritan" statute that exempts persons rendering free emergency care, which includes emergency obstetrical care, from liability for civil damages resulting from that care. Texas has passed an act effective September, 1989 providing immunity for physicians providing obstetrical care to women in Medicaid and other indigent care programs. Physicians must have at least ten percent of their practice serve this group in order to qualify. Regulations for the program are now being developed. In at least one other state, localities have enacted provisions for granting civil immunity for all obstetrical care given to Medicaid patients.

The granting of immunity is generally opposed by patient advocacy groups such as the Virginia Poverty Law Center, who endorse an injured patient's right to compensation. In addition, the determination of fault in birth injuries is not always clear. This is one reason Virginia has led other states in enacting alternative approaches. Rather than considering legislation for provider immunity, Virginia may be better served by enahncing the significant efforts already enacted in the Commonwealth: the Birth Related Neurological Injury Compensation Act and Virginia's administrative process for review of

pending liability claims.

Virginia's Birth-Related Neurological Injury Compensation Act

In another attempt to curb rising insurance rates and to reduce the numbers of physicians dropping obstetrical care, the 1987 General Assembly passed the Birth-Related Neurological Injury Compensation Act. The Act created a program designed to provide compensation to insure lifelong care for infants suffering a neurological birth injury while under the care of participating physicians and hospitals. Those providers are required to have an agreement with the State Health Commissioner through the District Health Directors to participate in developing a program to provide prenatal care to Medicaid and indigent patients; the Health Commissioner has signed agreement involving 29 out of 36 health districts. The intent of the Act is to relieve medical liability insurers of the risk associated with neurological injuries by creating a no-fault award system for qualifying cases, thus decreasing the number of suits and diminishing the need for increasing rates.

In order to enroll, obstetricians pay $5,000 annually; hospitals pay $50 per delivery subject to an annual maximum of $150,000. Nonparticipating physicians, with certain exemptions, are assessed $250. Major insurers in Virginia provide a discount on insurance premiums to participating physicians. In 1989, there are 42 hospitals and 402 obstetricians enrolled. To date, no payments have been made out of the Birth Injury Fund, which totaled $15,939,415 as of October 31, 1989.

A General Assembly subcommittee is studying the possibility of certain amendments to the program such as adjusting the definition of conditions covered by the Act. One issue under consideration is cerebral palsy, which current literature indicates is not related to either birth injury, oxygen deprivation during birth, or prenatal care.

Institute of Medicine Report on Medical Professional Liability

The Institute of Medicine (IOM) of the National Academy of Sciences initiated a study in 1987 to evaluate the effect of medical liability issues on access to and delivery of obstetrical care, The IOM assembled an interdisciplinary committee of fifteen, including experts in obstetrics, family practice medicine, law, ethics, health services research, insurance, economics, nursing and public policy. The members were appointed as knowledgeable experts rather than as representatives of particular constituencies, and they focused on the public interest and patients' concerns. The IOM report[5] was published in October, 1989 and concluded that obstetrical care shortages exist, especially in rural and inner city areas, and that medical liability problems contribute to impaired access. Significant numbers of providers are either eliminating obstetrical practice, limiting obstetrics earlier in their careers, or reducing services to high-risk women.

The report found a disproportionate effect on poor women, including those served by Medicaid. Medical liability insurance premiums are a burden to providers, especially family practice physicians and nurse-midwives. The IOM Committee found no evidence of excessive profit taking by insurers but cited an

increased frequency and severity of claims and the effect of the economy's lower interest rates on insurers' investment income. In reviewing the tort system, the committee concluded that the tort process is slow and costly and that this is contributing to the obstetrical care problem. Judging that tort reforms are not likely to slow providers' exodus from obstetrical care, the committee recommended that additional attention be paid to tort system alternatives. The report's long term recommendations:

1. States should consider alternatives to the tort systems
2. The federal government should support demonstration projects
3. A National data base on malpractice claims should be developed
4. Systematic technology assessment is needed

The report's short-term recommendations:

5. States should focus on the access problem of the poor at once
6. Federal tort claim act coverage, or its equivalent, should be extended to certain obstetrical practitioners
7. States should contribute to professional liability coverage for Medicaid providers
8. The National Health Service Corps should be expanded

Under the first recommendation, the IOM Committee specified three alternatives to the tort system for states to consider implementing on a limited basis. The first alternative is the no-fault approach, including Virginia's Neurological Birth-Related Injury Act. The second alternative is the contract approach, in which the patient and physician enter into an agreement regarding their respective performances and any award would be based on the degree to which would be based on the degree to which either party fails to perform as agreed. This approach would tend to have a minimal effect on deterrence, and it raises the question of whether a physician and a patient are really equal parties as is theoretically the case in a contractual relationship. The third alternative to the tort system is the AMA-Specialty Society Medical Liability Project approach, which was developed over a two year period by the AMA, 31 national medical specialty societies and the Council of Medical Specialty Societies. This approach encompasses the tort system's goals of compensation and deterrence; it is an administrative, fault-based system of resolving claims that avoids the current system problems of inconsistencies in judgements, system costs, and impaired access to care. The steps in the process include;

- Initial Claims Review (peers with attorney assistance)
- Hearing Before Expert Hearing Examiner (expedited discovery and prehearing settlement conferences)
- Appeal to Medical Board Panel
- Appeal to State Appellate Court (jurisdictional issues only)

Components of the AMA-Specialty Society Medical Liability Project approach which differ from the traditional tort system include the following:

- review of cases with dismissal of claims lacking apparent merit (patient has right of resubmission upon submitting statement from expert provider attesting injury was likely caused by inadequate care)
- hearing by examiner experienced in medical injury claims rather than jury
- decision, including damages that should be reimbursed, required within 90 days
- clear reference points on the relative

value of similar claims
- decision of hearing examiner subject to review by board/panel of physicians and consumers
- rejection of locality rule in standard of care, with consideration of the availability of specialized equipment and personnel
- damages apportioned according to providers' relative contribution to causation, allowing for recognition of the role of preexisting conditions
- damages based on separate components of lost income plus expenses from the injury rather than a lump sum request.

Like forty other states, Virginia has enacted a similar administrative process. A Virginia physician, upon receiving notice of a suit, may request a panel to review the circumstances and recommend to the patient whether there appears to be a valid case. The panel includes a retired circuit court judge. The process is conducted under the auspices of the Virginia Supreme Court. Virginia's administrative process might be enhanced by adopting one or more components of the AMA-Speciality Society Medical Liability system.

A medical mediation service has been established within the Center for Public Service at the University of Virginia. Upon request for this service, typically through an insurance company or an attorney, the medical records are reviewed by the Center's staff and a resolution acceptable to all parties is sought; since the parties seeking mediation must agree in advance not to subpoena the Center's records on the case, this process would not be prejudicial to any subsequent litigation. Binding arbitration is also available through the Center, in which case a review panel consisting of a physician with relevant specialty training, an attorney; and a layman (who serves as chairman) decides whether there is liability and, if there is, determines the compensation. These services have been available for about one year, although much of that time has been devoted to startup activities; there are currently eight active cases.

Health Care Insurance

Uninsured Virginians, a significant concern, are not covered by private or public health insurance or are inadequately covered. A 1989 report to the Joint Subcommittee on Health Care for All Virginians (SJR 214), Subcommittee on Indigent Care indicated that about 14.6 percent of Virginians under age 65 lack health insurance. This report by the consultant firm of Peat Marwick analyzed data from a 1986 State Corporation Commission (SCC) survey and the Current Population Survey data for Virginia and the Nation. National and State data indicate that young adults between 18 and 35 years of age are particularly at risk for lack of coverage.(Peat Marwick) The following is representative of the findings of studies on the uninsured: "Uninsured persons are less likely to see a physician over a twelve-month period, are less likely to get early prenatal care, have their children immunized, or their blood pressure checked regularly."[4 p.1]

Women who are uninsured represent an increasingly heavy burden for private physicians who must decide how much uncompensated care they can afford to provide. Sound business practice requires that physicians be able to meet their basic operational expenses. For this reason,

only limited numbers of physicians are willing to accept patients who are medically indigent or who have no health insurance. Physicians accepting self-pay patients may require much of the total expected payment at the beginning of care, rather than spaced throughout the pregnancy. The working poor do not have the lump sum payment needed to start care. Many, acknowledging their inability to pay, will simply not seek care. Extension of basic insurance coverage to more working mothers would begin to meet this need. There is the logical cost benefit from avoiding the likelihood of a poor outcome and inevitably more costly inpatient care later.

For most indigent persons, Medicaid is the sole source of insurance. The federal Budget Reconciliation Act will soon require Medicaid coverage for certain persons at or below 133% of poverty level; in addition, states may choose under current law to raise that threshold to as much as 185% of poverty.

A study on access to care, outcomes and costs was conducted by the Virginia Hospital Association in 1987. The sample was taken from six hospitals that deliver obstetrical services to both normal and high risk patients and represented approximately 25% of the total births that year. The findings included a confirmation of the relationship between lack of insurance coverage and birth outcomes. Both the Medicaid population and the uninsured began care later in pregnancy; compared with the statewide experience in which approximately 80% of mothers begin care in the first trimester, 71% of Medicaid mothers and 64% of uninsured mothers started their care in the first trimester. Over 9% of the Medicaid mothers and over 13% of the uninsured mothers had low birthweight infants, compared with approximately 7% of Virginia's total births. "The data clearly indicate that the lack of coverage is accompanied by reduced access to prenatal care and to increased probability of adverse birth outcomes."[13, p.12]

District Health Directors report that indigent pregnant women often bypass closer private, non-profit centers in order to reach a teaching hospital, where they pay for services on a sliding scale basis. From the Northwestern counties or those in Southside, these trips can require a drive exceeding 100 miles. Having health insurance would enable many of these mothers to obtain care locally.

As health insurance premiums continue to rise, employees with insurance are at risk. Many employers have experienced annual increases in their contribution and are increasingly faced with difficult choices. Employers are asking employees to carry a greater proportion of their premiums, or they are rewriting insurance plan packages to contain reduced benefits and/or greater deductibles. This increase in the number of persons with greater out-of-pocket responsibilities fosters the undesirable cycle that results in higher health care costs; more costly services are eventually required because appropriate care was not received in a timely fashion. Private health care insurance companies can play an important role in halting these spiralling patterns. Blue Cross/Blue Shield of Virginia has reported to SJR 214 its proposed initiative to provide an affordable health insurance package to small business employers. The focus of its proposal is on preventive services and meeting the routine needs of the majority

population, including obstetrical services. It is essential for any insurer that is developing such plans to include maternity benefits.

Many District Health Directors, including those in urban as well as rural areas, confirmed that lack of transportation is frequently a barrier to accessing care. Public hearings substantiated this as a significant problem. It is often a cause of missed appointments but may be misunderstood as a sign of uncooperative or noncompliant patients. Virginia presently has an opportunity to utilize approximately $1,000,000 being made available from the Texaco Oil Overcharge Settlement Funds. The funds are targeted to the provision of energy-efficient transportation, such as van pools, for the transportation disadvantaged, in particular the elderly and Medicaid recipients. Private nonprofit organizations and public agencies are eligible to apply. The Interagency Coordinating Council for the Transportation Disadvantaged, composed of representatives from nine state human service agencies, will administer the funds, with vehicles being purchased through the Department of Transportation. Grants awarded will cover 80% of the total cost of the vehicle, with the applicant being responsible for the 20% balance; operating expense funding is not included. The total funding available will be dependent on the amount of overcharge funds received by the Commonwealth.

SYSTEM/ATTITUDINAL BARRIERS

A variety of system and attitudinal barriers represent hurdles to obtaining care. Factors such as the reimbursement system and transportation problems affect attitudes of both patients and those providing their care. Patients in lower socioeconomic groups who resist seeking prenatal care may lack appropriate role models. Unwanted pregnancies pose a significant attitudinal barrier to seeking early care.

As confirmed in the Medical Society's survey, physicians have perceived the paperwork required to file for Medicaid reimbursement as a disincentive to participation in the program. This was described as the "aggravation factor" by Dr. Bruce Jackson, who recently moved his practice from Abingdon to North Carolina. Recent efforts by the Virginia Department of Medical Assistance Services have streamlined the filing process, while maintaining compliance with the federal mandates that govern the program. The current interval between receipt of an accurate Medicaid billing form and mailing of reimbursement is two to three weeks. (DMAS) To resolve physicians' concerns regarding retroactive denial of Medicaid reimbursement, a policy which the Department of Medical Assistance Services (DMAS) enacted on July 1, 1989 assures continued eligibility throughout pregnancy and delivery for all Medicaid recipients. DMAS also developed a teleconference inservice education program for eligibility workers to increase their effectiveness in processing claims and enrollment applications.

Physicians, recognizing that poor women are more likely to suffer from poor outcomes, fear that these women are also more likely to sue. In fact, recent surveys have indicated that the poor are less likely to sue than the general population.[10]

The manner in which patients perceive they are treated by those providing services is an important factor in their seeking care. Providers need to have a sensitivity toward this and must ensure that all staff approach their patients as individuals. In addition, the traditional system of daytime clinic and office hours causes difficulties for working mothers who cannot keep appointments without taking leave time. The need for child care during clinic visits is cited as a problem for many. In some parts of the state, language barriers are becoming an increasingly serious problem as the number of non-English speaking patients increases. Additional resources in both regular and volunteer staff would begin to meet many of these needs.

According to a Missouri study, "Whether or not a woman intends to get pregnant and how she feels about the pregnancy appear to be central elements in the obtainment of prenatal care. Unplanned and unwanted pregnancies are clearly a barrier to obtaining early and adequate prenatal care."[15] The implications for strengthening the availability of pre-conception and family planning services is clear. Each visit for services to prevent an unwanted pregnancy has the potential to avoid the cost of multiple prenatal visits as well as the cost of delivery.

As Virginia's funding from various local, state and federal sources increased to improve prenatal services, increases did not occur in the family planning program. New family planning funding has been essentially limited to the sterilization program, which in fiscal 1989 provided funding for over 700 individuals at risk for poor pregnancy outcomes. Many local health departments are not meeting their communities' need for family planning services (*need* is defined by broad age groups using methodology developed by the National Centers for Disease Control. According to the Health Department's Division of Family Planning, various factors impact local health departments' capacity to provide family planning services. One is that many patients have sexually transmitted disease, requiring multiple visits for treatment. Staff must advise patients about safe sex practices, offer Human Immunodeficiency Virus testing (for AIDS), plus AIDS counseling and education. The shift toward serving older age groups has resulted in additional service requirements: local health departments have instituted clinics to evaluate large numbers of patients with abnormal laboratory tests for cervical cancer because community referral sources are unable to do so. All of these factors have created competition for family planning clinic resources.

There are still large numbers of women in need of family planning services but local health departments do not have outreach staff to bring them in or to work with teens who need closer supervision and follow-up. Even if outreach activities brought in more patients, additional clinics would be needed to manage the increased services. Outreach staff could also provide early case finding for maternity patients at high risk for poor pregnancy outcomes.

The number of patients being seen in health department family planning clinics is dropping (see Figure 22). This decrease is associated with the nationwide trend toward a reduced adolescent population but is primarily due to a shift in health department resources from family planning to maternity services. Figure 23 shows the decreases in the percent

of women in need of family planning services served by the state program between 1986 and 1989. With the association between unwanted pregnancies and delay in seeking prenatal care, it is only rational to continue supporting a program that prevents these pregnancies.

Figure 22
Women Served By Health Department Family Planning Program

Age	1986	1987	1988	1989
10-14	1,487	1,559	929	863
15-19	25,803	28,012	24,929	22,650
20-24	33,441	31,868	31,543	28,682
25-44	28,557	26,962	30,578	30,097
Total	89,228	88,989	88,479	82,704

Source: Division of Family Planning, VDH

Figure 23
Percent of Women in Need Served

Age	1986	1987	1988	1989
10-14	6%	13%	8%	7%
15-19	33%	37%	34%	31%
20-24	32%	31%	31%	28%
25-44	12%	11%	12%	12%
Total	20%	21%	20%	19%

Source: Division of Family Planning, VDH

PUBLIC AWARENESS

Analysis of vital statistics records indicates that infants have a better chance of a healthy start if their mothers participate in any prenatal care, compared with those who do not. It is important that public education focus on two targets: (1) mothers, emphasizing the importance of seeking prenatal care early; and (2) the public, emphasizing both the importance of early prenatal care and the necessity of making quality care available to all women throughout the Commonwealth, without regard for their ability to pay.

The Beautiful Babies projects in Northern Virginia has succeeded in educating the public on the importance of prenatal care. Such programs work through the local media and other private sector businesses to reach those women most likely to experience difficulty in accessing prenatal care services. In Virginia a small number of localities, such as Richmond City, have successfully utilized similar approaches with the support of the news media. Success of these approaches is enhanced by "public service" commitment of commercial or network stations, often achieved through the negotiation of exclusive coverage. "Prime time" broadcasts by television or radio stations are most likely to reach the target population.

The public demands effective and efficient use of state funds, and general consensus on which programs should receive the largest share of those funds is driven by both real and perceived needs. A greater understanding of the benefits reached through the investment of state dollars in preventive prenatal care programs is needed at large. The women

and families of Virginia with ready access to prenatal care have little reason to be aware of the seriousness of this crisis among the disadvantaged. Likewise, many lack an understanding of the cost savings that will be experienced by the state, and the taxpayer, through the investment in policies and programs that will address the barriers identified by this study. Through public information campaigns, Virginians should be informed on the advantage of early comprehensive prenatal care and the long term benefit of supporting access to that care.

RELATED ISSUES

The work group, as described in the introduction, held six meetings between May and November,1989 in order to incorporate various perspectives of the obstetrical access problem. In addition, firsthand information on Virginia's system for obstetrical care was presented to regional health planning agencies (formerly Health Systems Agencies) through public hearings on the issue of access to care. Themes from these hearings mirror the findings discussed in this report, including the need for care for adolescents and the lack of transportation. Physicians have spoken to the problems of Medicaid reimbursement and medical liability insurance, plus the difficulties of solo practice. The need for case management, as available through the BabyCare program, was confirmed. One obstetrician, from Northwest Virginia, who has discontinued participation in the Medicaid program discussed the system problems. Patients who present higher risks due to socioeconomic factors, reduced compliance with medical advice, poor nutrition, substance abuse, and similar factors need a stable support system in order to have good pregnancy outcomes. Coordinated care systems could diminish these risks by increasing the overall capacity to provide such support. Agencies such as the Department of Health, the Department of Mental Health, Mental Retardation, and substance Abuse Services, as well as programs such as Babycare and Resource Mothers could provide this type of support if there were a sufficient investment of state dollars in these prevention efforts. If statewide reductions in infant mortality rates were to approach those found in the preliminary evaluation of the Resource Mothers programs, less money would be expended in newborn intensive care units. Beyond a more effective use of state dollars, improved pregnancy outcomes will ultimately have a beneficial impact upon medical liability insurance costs as well.

Public hearings also confirmed that a policy decision is needed on whose role it is to provide services for uninsured and indigent patients. Local Health Departments do not have the resources or the capacity to serve all of Virginia's uninsured and indigent mothers. Most health departments have the capability to provide prenatal care for a portion of this group but do not have physicians available to perform deliveries. The traditional role of the Department of Health is prevention and health promotion. It may be best to strengthen this role so that the community physicians providing medical services would have access to patient support services through the department. Likewise, the Department of Mental Health, Mental Retardation and Substance Abuse Service programs could support mothers with alcohol or other drug dependencies. With adequate funding, interagency referrals could provide prevention, working in close cooperation

with the private physicians to support them as primary care providers.

The work group expressed concern about the quality of obstetrical care. For example, local health departments have experienced serious difficulty attracting physicians with the specialty required for high-risk obstetrical care. Even basic procedures, such as monitoring fetal heart tones, may not be performed at every prenatal visit. The State Perinatal Services Advisory Board has identified quality of care as a priority issue. Since the issue of quality is outside the scope of this SJR 168 report on access to care, the Department of Health and the State Perinatal Services Advisory Board are developing criteria for evaluating quality. In response to SJR 225, the perinatal board has recently proposed revised rules and regulations for hospital licensure relative to obstetrical and newborn services.

In order to determine program effectiveness, accurate statistical information on prenatal care and pregnancy outcomes is essential. This data is generated from birth certificates completed by physicians and hospital personnel. The method of collecting birth related data raises questions about the validity and consistency of this data. For example, various definitions of the first prenatal visit utilized by the individuals reporting may consist of either: **a pregnancy test, a screening assessment by a nurse, or a physical examination by an obstetrician.** The data collection system is based on hospital staff questioning new mothers on their prenatal care and is reported to introduce bias in the manner of phrasing the questions. For example asking a new mother if she had the "normal" number of prenatal visits has been reported to generate the recording of ten prenatal visits on the birth certificate. A system for computer linkage between hospital records and state vital records can facilitate timely and accurate data collection. Such a system is currently being used in Wisconsin and Virginia is piloting a similar approach. A related issue is the frequent lack of prenatal care records being available to the hospital at the time of delivery. The lack of reliable data compromises the ability to evaluate obstetrical services fully, especially in regard to access to care.

The study process also identified, as a broader issue, the need for more uniform methods for evaluating prenatal care services became apparent. What is the standard for acceptable access to prenatal care? Should the number of visits as well as the month they begin be part of this determination? The literature and current research methods suggest a combination of the month prenatal care begins and the number of visits as a measure of "adequacy" of care. The Perinatal Services Advisory Board's initiative to focus on quality as well as access issues should provide a focus for establishing standards by which to evaluate obstetrical care.

RECOMMENDATIONS

Steps must be taken to remove each of the barriers to care. Although any one remedial activity may have impact on each of the problem areas as identified in this study, the success that one recommendation will have may be dependent upon the simultaneous implementation of another recommendation. The following recommendations are listed in relationship to the four major barriers as identified earlier within the text of the report:

- maldistribution of providers of care;
- financial barriers;
- system/attitudnal barriers;
- a lack of public awareness of the problem about health issues.

I. In order to ensure providers are available throughout the state for all women regardless of their ability to pay, the Virginia Health Planning Board recommends that the Governor and the Virginia General Assembly:

A. support funding requests to increase access to basic medical care services by supporting and expanding the Commonwealth's primary care system;

Rationale: The Primary Care Initiative presented by the Virginia Department of Health, in its 1990-1992 biennium budget request, aims to encourage physicians and other providers to locate within areas of the state now experiencing a shortage of primary care physicians. Included within the definition of "primary care" is the provision of obstetrical services. The benefits of this approach will help not only the primary care shortages but also the lack of prenatal care.

B. empower the Boards of Medicine, Nursing, and Pharmacy to pursue the changes necessary to allow for broader participation by nurse practitioners, including nurse midwives, as appropriate, in the delivery of obstetrical care services;

Rationale: Experiences within the state and across the country show that the use of nurse practitioners can fill gaps in medically underserved areas. The Lynchburg community has effectively demonstrated the contribution nurse-midwives can make. The Task Force on the Practice of Nurse Practitioners will submit an interim report to the Secretary of Health and Human Resources in December, 1989, and a final report to the Secretary in the Spring of 1990. Recommendations to allow nurse practitioners greater participation in practice and support to physicians, particularly within medically underserved areas of the state, should be pursued. Incentives developed to bring physicians into underserved areas should also be provided for supporting medical professionals.

C. provide funding and manpowerto assist all localities in the replication and expansion of joint public and private programs, providing greater access to quality prenatal care regardless of the patient's payment source.

Rationale: Efforts underway in programs such as the Pre-Term Birth Prevention Program throughout the state have proven effective in improving the outcomes of high-risk pregnancies. In the Pre-Term Birth program example, expansion of the concept could enable the provision of prenatal visits for some high-risk pregnant women locally rather than in the more distant regional perinatal centers. Localities most in need of obstetrical care can develop innovative solutions with private practitioners if financial and programmatic support are available to encourage the implementation of joint ventures.

II. In order to remove financial barriers to care, the Virginia Health Planning Board recommends that the Governor and the Virginia General Assembly:

A. fund the increase in Medicaid reimbursement rates sufficiently to attract

and retain physician participation, incorporate regional variations, and include an automatic inflator to allow reimbursement rates to keep pace with increases in costs of care; phase in eligibility increments as authorized by Federal regulations, to 133% of the poverty level as mandated in the federal Budget Reconciliation Act and ultimately to the fullest extent permitted under federal law;

Rationale: While Virginia's Medicaid reimbursement rates have been increased in recent years, the proportion of increase has fallen behind the pace of increase in the cost of providing care. If the number of physicians accepting Medicaid reimbursement continues at present levels, Medicaid recipients' access to care will remain constrained. According to a National Governor's Association report, the differential between public and private payment levels is a significant factor in influencing a physician's decision on participation. While increases in Medicaid reimbursement increase physician participation, concurrent increases in costs reduce participation at a greater rate. The report concludes, "Since the literature indicates that equal percentage increases in private and public reimbursement levels can result in reduced participation, public program fees need to be increased at a greater rate in order simply to maintain, much less increase, provider participation." (Increasing Provider Participation, National Governors Association, 1988, pg. ix) In addition, increasing the recipient eligibility levels will enable the Commonwealth to receive more matching federal dollars to provide services to the working poor.

B. enact legislative changes as required to enable private insurance and/or health maintenance organizations to offer affordable plans to small business employers such as has been proposed by Blue Cross and Blue Shield of Virginia, and require those plans to include maternity coverage for their employees and dependents; *(Note: the Board recognizes, however, the relationship between affordability and the nature and number of coverage mandates.)*

Rationale: Financial barriers to care are most significant for low-income working women who do not qualify for Medicaid participation and are not enrolled in basic health insurance plans through their employer or personally. Many are employed by small businesses that cannot afford traditional health insurance plans. Any legislation that would serve to increase the number of employers providing health plans would decrease the number of women who delay prenatal care due to lack of financial resources. Both participants and the system would benefit from early preventive care through primary care providers rather than later, more expensive care in emergency rooms. Mandated maternity coverage is therefore recommended even though it is acknowledged that affordability is directly related to the number and nature of coverage mandates.

C. focus existing resources and efforts to increase the availability of transportation for women to obstetrical care providers;

Rationale: The best medical care is of no use if women are unable to reach the service. Virginia already has a well defined problem with transportation to existing care providers, particularly in rural areas. Some of the resources available to

minimize this problem are ineffective due to the lack of a coordinated program. Solutions should be focused on existing resources and coordinated with others now available into a centralized system, targeted to the medically underserved areas of the state. A portion of funding available from the Texaco Oil Overcharge Settlement Fund should be targeted for use in meeting the critical transportation problem.

D. implement such approaches to the medical liability insurance issue as:

1. paying part of the medical liability insurance premiums for medical providers of obstetrical care for medically underserved communities and medically indigent populations;

Rationale: Physicians frequently include the high cost of malpractice premiums when discussing the factors that influence decisions on what populations a practice will serve. Recent efforts by the State Corporation Commission regarding these issues should be commended; however, additional efforts should be made to reduce the cost of malpractice for physicians and nurse practitioners who are willing to serve populations less attractive to the economics of private practice in order to encourage adequate service to underserved populations across the state. An initiative modeled after the North Carolina program providing medical liability premium assistance would require funding of approximately $ 400,000 if targeted to medically underserved areas and $ 1.7 million if implemented statewide.

2. endorsing those recommendations of the legislative study group researching the Birth-Related Neurological Injury Compensation Act which would enhance its utilization and effectiveness;

Rationale: At the present time, the HJR 297 legislative study is evaluating the utilization and effectiveness of the Neurological Birth Injury Act since its inception in 1988. The study committee is expected to recommend changes, such as in the criteria for defining birth related neurological injuries.

3. the Commonwealth assuming some or all of the financial risk of medical liability judgments against medical providers who provide obstetrical care for Medicaid and medically indigent patients in collaboration with the Department of Health;

Rationale: Some physicians perceive a greater threat of suit for malpractice from women participating in the Medicaid program because of their increased likelihood of a poor pregnancy outcome. While research has demonstrated that this is not the case, the perception remains and is a barrier to care. This approach would include minimum participation guidelines and the opportunity for continuing education on patient safety and risk reduction. The purpose of such legislation is to diminish physicians' perceived risk in providing services to medically indigent populations, thus removing from consideration one barrier to physician participation in the Medicaid program.

4. encouraging statewide proliferation of medical mediation services such as those offered by the University of Virginia's Center for Public Service;

Rationale: Resolving claims before they reach the tort system results in cost savings and reduces the threat of lawsuits. The

time required to settle the claim can be significantly reduced.

5. incorporating, within Virginia's approach to managing claims, elements of the administrative review system advocated by the Institute of Medicine.

Rationale: The administrative fault-based system provides for claims resolution through a specialized administrative agency outside of the civil justice system. This method, by applying a negligence standard and monitoring physician practices, provides the tort system advantages of compensation to the patient and deterrence of poor quality care, but at less cost. It provides for expertise on both sides to mediate claims in an effective and efficient manner. (IOM Report, Vol. II) North Carolina is enhancing its approach to the liability insurance issue by the use of a commission to carry out a similar function.

III. In order to enhance the system's policies and practices that have a positive effect on women's attitudes toward obtaining prenatal care, the Virginia Health Planning Board recommends that the Governor and the Virginia General Assembly:

A. support funding needed to provide the manpower necessary to implement initiatives such as case management for high risk women;

Rationale: Programs such as BabyCare are prevention oriented. Utilizing proven methods of case management improves pregnancy outcomes among high risk pregnant women. Not enough providers are currently available within the Department of Health to make the services available to those women who should have access to the program. With additional funding and personnel to implement BabyCare fully, the Commonwealth can expect to avoid the more costly hospital care required for low birth weight babies.

B. support funding needed to expand programs providing counseling and support to adolescents;

Rationale: The success of counseling programs in improving pregnancy outcome and the parenting skills of participating mothers is well documented. Virginia's Medicaid program is the first in the nation to be granted authority to reimburse services provided through Resource Mothers programs. New mothers in such programs are more likely to overcome certain individual barriers to care, and are more likely to serve as advocates for care among their peers. Increasing the reach of counseling programs helps diminish certain attitudinal blocks to care, thus ultimately improving pregnancy outcomes.

C. support other related health programs such as family planning and family life education;

Rationale: Healthy families enhance the overall health of a society. Viewing obstetrical care within the broad context of preconceptional health reveals the importance of primary prevention. Adolescents experiencing unplanned and unwanted pregnancy are more likely to delay prenatal care and are least motivated to comply with primary medical advice directed toward healthy outcomes. Efforts to increase prenatal care access must also include educational programs such as family life education and primary medical care services that promote heal-

thy childbearing and minimize unplanned pregnancies. Virginia has led the country in the promotion of family planning and must return to a higher level of commitment to this service. Recent demands for increased maternal and child health programs in the Department of Health have resulted in a decrease in the number of family planning visits, which can only lead to more unplanned pregnancies and increased costs. Other prevention and treatment programs, such as substance abuse services, must also be enhanced.

D. encourage volunteerism by such means as providing for the inclusion of activity under agencies' liability policies.

Rationale: There are potentially many Virginians who might serve as community volunteers. These individuals are more likely to give of their time in the public sector if they are reassured that the Commonwealth's liability policies protect them in the event of a mishap during the course of their activities.

IV. In order to increase public awareness of the importance of early prenatal care, the Virginia Health Planning Board recommends that the Governor and the Virginia General Assembly:

A. support funding to extend existing public education and information programs, such as the Beautiful Babies program, especially to localities with high infant mortality and low birth weight rates;

Rationale: While the importance of early prenatal care is accepted among certain segments of Virginia's population, a significant number of women still do not understand the benefit of this care. This is particularly true among adolescent and indigent populations. Public information campaigns should be funded and targeted to those groups most likely to delay prenatal care.

B. adopt a joint resolution to endorse formally those activities, both public and private, that promote the adoption of early prenatal care by and for all pregnant women, regardless of individual circumstances and to call for the removal of all barriers to care.

Rationale: Through such a resolution, the General Assembly not only presents to the Commonwealth its continuing commitment to promoting innovative solutions to problems but challenges the private sector to participate in the eradication of the current crisis in access to obstetrical care.

BIBLIOGRAPHY

1. American Business Lists, Inc. 1989. Data provided to Division of Health Planning, Virginia Department of Health.

2. Brewer, Julie R., CNM. Not dated. **Nurse-Midwifery in 1989: In Lynchburg, In Virginia, In the USA.** Materials compiled for the Governor's Infant Mortality Council.

3. Committee on Health Care for Underserved Women. Not dated. **Ob/Gyn Services for Indigent Women: Issues Raised by an ACOG Survey.** Washington, DC: The American College of Obstetricians and Gynecologists.

4. Davis, Karen, et al. 1988. **Uninsured in Virginia.** Draft report (2/10/88) prepared under contract with Virginia Department of Medical Assistance Services.

5. Institute of Medicine. 1989. **Medical Professional Liability and the Delivery of Obstetrical Care.** Washington, DC: National Academy Press.

6. Institute of Medicine. 1985. **Preventing Low Birthweight: Summary.** Washington, DC: National Academy Press.

7. Joint Subcommittee on Financing Maternal and Child Health Care. 1988. **Report of the Joint Subcommittee on Financing Maternal and Child Health Care to the Governor and General Assembly of Virginia.** Richmond, VA: Commonwealth of Virginia (Senate Document No. 15).

8. Legislative Task Force on Infant Mortality. 1986. **Report of the Legislative Task Force on Infant Mortality to the Governor and the General Assembly of Virginia.** Richmond, VA: Commonwealth of Virginia (Senate Document No. 26).

9. Lewis-Idema, Deborah. 1988. **Increasing Provider Participation.** Washington, DC: National Governors' Association.

10. McNulty, Molly, JD. 1989. Are Poor Patients Likely to Sue for Malpractice? **JAMA** 262(10) (September 8).

11. Medical Society of Virginia. 1989. **Problems and Solutions Relating to Access to Obstetrical Care Virginia Physicians Respond** Survey Report, December 12.

12. Nursing Council Subcommittee. 1989. **Report on the Role of the Nurse Practitioner in the Virginia Department of Health.** Unpublished report, Virginia Department of Health, Richmond, VA.

13. Pace, Stephen C. and Elizabeth Follette. 1987. **Pregnancy Coverage in Virginia: Access, Outcomes, and Costs.** Unpublished report prepared for the Virginia Hospital Association, Richmond, VA (October 1).

14. Richmond City Health Department, Division of Planning and Evaluation. 1989. **Analysis of Infant Deaths Occurring to Richmond Residents in 1986.** Richmond, VA: Richmond City Health Department.

15. Sable, Marjorie R., et al. Not dated. **Barriers to Prenatal Care: The Missouri Experience.** Unpublished paper presented to the 116th annual meeting of

the American Public Health Association, 1988.

16. State Perinatal Services Advisory Board. 1988. **Statewide Perinatal Services Plan.** Richmond, VA: Virginia Department of Health.

17. Statewide Council on Infant Mortality. 1988. **Healthy Babies: Virginia's Future.** Richmond, VA: Office of the Secretary of Health and Human Resources.

18. Statewide Health Coordinating Council, et al. 1989. **Virginia Perinatal Health.** Richmond, VA: Virginia Department of Health.

19. U.S. Congress, Office of Technology Assessment. 1986. **Nurse Practitioners, Physicians Assistants, and Certified Nurse Midwives: A Policy Analysis** (Health Technology Case Study 37). Washington, DC: USGPO.

19. U.S. Congress, Office of Technology Assessment. 1986. **Nurse Practitioners, Physicians Assistants, and Certified Nurse Midwives: A Policy Analysis** (Health Technology Case Study 37). Washington, DC: USGPO.

20. U.S. Department of Health and Human Services. 1985. **Characteristics of Physicians: Virginia.** Washington, DC: USGPO.

21. Virginia Department of Medical Assistance Services. 1988. **Legislative Studies.** Unpublished report of the Virginia Department of Medical Assistance Services, Richmond, VA.

GLOSSARY

GLOSSARY OF TERMS

Accessibility: a measure of an individual's ability to obtain available health care services. Determining accessibility involves analyzing the degree to which there are geographic, architectural, transportation, social, temporal (time/access), economic, cultural, and linguistic barriers to utilizing appropriate services.

Availability: a measure of the supply and mix of health services and the capacity of resources for providing care. The mere presence or absence of a given service is the simplest measure of availability. A better measure of availability is whether or not a particular service is present in the appropriate quantity.

Community Health Center (CHC): an organization receiving federal funding for the provisions of primary care services to communities characterized by their limited access to services due to geographic isolation, lack of medical providers, high poverty, and poor health status. CHCs are federally mandated to accept patients regardless of ability to pay, provide a comprehensive array of primary medical care including referral services, and are governed by a volunteer, community board of directors. Health promotion and protection: services which are directed toward informing, educating and motivating the public to adopt or improve personal health behavior.

Health Manpower Shortage Area (HMSA): an urban or rural area or population group (does not need to conform to political boundaries) designated under federal criteria as having a shortage of health manpower or public or nonprofit private medical facilities. Generally, these designations are made in consideration of health manpower personnel to population ratios and the availability of health resources in contiguous areas. (Designated underserved localities in Virginia are indicated on Figure 10)

Infant deaths: the death of a child born alive who dies under one year of age. Infant mortality rate: Number of deaths under one year of age per 1,000 live births.

Live birth: The Vital Statistics Laws of Virginia Chapter 7, Section 32.1-249.7 defines live birth as any product of human conception which shows any sign of life. Low weight birth: an infant whose weight at birth is equal to or less than 5 pounds and 8 ounces, (or 2500 grams).

Medically Underserved Area: urban or rural areas, designated under federal criteria as having a shortage of personal health services. Medically Underserved Areas are designated based on four factors: (1) the primary care physician to population ratio, (2) the infant mortality rate, (3) the percentage of the population living below the federal poverty level, and (4) the percentage of the population that is age 65 and older. The Medically Underserved Area designation is used by the Department of Health and Human Services to target localities eligible for National Health Service Corps Personnel placements and Community Health Center funds.

National Health Service Corps (NHSC): a federal program designed to place physicians, dentists and other health professionals in areas designated as Health Manpower Shortage Areas (HMSA). Generally, persons participating in the NHSC were either directly recruited into the NHSC or private practitioners who accepted NHSC scholarships while attending medical or other health professions schools. The scholarships obligated the individual to serve in a HMSA upon completion of their professional training. The period of obligation was equal to the number of years the scholarship was received with a minimum of two years obligated service required. Because of highly publicized reports released in 1980 indicating a nationwide surplus of physicians, Congress reduced funding for NHSC scholarships essentually eliminating the scholarship program.

Non-white: persons of African American ancestry (blacks), any reported mixture or such persons with any other race, and all other persons and mixtures of persons who are not members of the white (Caucasian) race. For live births, however, white and non-white refer to the race of the mother.

Nurse practitioner: a registered nurse qualified and specially prepared to provide primary care (under the supervision of a physician, but not necessarily in his presence).

Percentile: The level at which other physicians' charges are equal to or lower than the percentage indicated, for example, the 25th percentile is the charge level at which one-quarter (25%) of physician charges are the same or lower (DMAS).

Physician's assistant: a specially trained and licensed (when necessary) or otherwise credentialed individual who performs tasks, which might otherwise be performed by physicians themselves, under the direction of a supervising physician. Primary care physicians: Physicians, whether allopathic (M.D.), or osteopathic (D.O.), licensed and practicing one of the following specialities: family practice, general practice, general internal medicine, pediatric medicine or obstetrics and gynecology.

Primary health care services: diagnostic, treatment, consultative, referral and other services provided by physicians and, where feasible, by physicians' assistants, nurses and nurse practitioners. Primary care services also include diagnostic laboratory and radiologic services, preventive health services including nutritional assessment and referral, preventive health education, prenatal and post-partum care, immunizations and family planning services.

Primary care: basic or general health care delivered at the point of entry into the health care system. The purposes of primary care are to maintain health and to diagnose and treat less serious, common illnesses. Usually, primary care is provided on an outpatient basis.

Perinatal care: Health care provided to pregnant women and infants including comprehensive prenatal services, labor and delivery service, and neonatal special care.

Prenatal care: health care, prior to delivery, generally through a series of visits, for the purpose of obtaining positive pregnancy outcomes, by encouraging healthy behaviors, monitoring progress

and detecting and managing potential problems.

Secondary care: health care delivered in the general short-term hospital, nursing home, or emergency care facility, or provided by specialized physician consultants. Generally, secondary care services are needed less frequently than primary care services admitted to hospital(s).

Tertiary care: highly specialized services, such as cardiac care, burn care, neonatal intensive care, and end-stage renal disease services, that require sophisticated technology, personnel, and support facilities. Tertiary care is generally provided on an inpatient basis.

Third-party payor: any public or private organization that pays health or medical expenses on behalf of beneficiaries (e.g., Blue and Blue Shield, Medicaid, Medicare).

White: persons reported as Caucasian, Mexican, Puerto Rican, or not otherwise specifically designated as non-white.

APPENDIX B

OBSTETRIC BEDS IN VIRGINIA HOSPITALS

FACILITY NAME	NO. OF BEDS 1984*	NO. OF BEDS 1987**
Alexandria Hospital	40	40
Arlington Hospital	27	36
Fairfax Hospital	80	100
Fair Oaks	0	25
Loudon Memorial	13	13
Potomac Hospital	12	12
Prince William Hospital	14	14
Planning District 8 Total	**186**	240
Lee County Community	0	2
Lonesome Pine Hospital	7	7
St. Mary's Hospital-Norton	10	10
Wise Appalachian Reg'l. Hospital	7	7
Planning District 1 Total	**24**	26
Buchanan General Hospital	10	0
Dickenson County Medical Center	6	0
Humana Hospital-Clinch Valley	14	14
Mattie Williams Hospital	6	0
Russell County Medical Center	7	7
Tazewell Community Hospital	3	0
Planning District 2 Total	**46**	**21**
Bristol Memorial Hospital	16	16
Johnston Memorial Hospital	15	15
Smyth County Community	11	11
Twin County Community	13	17
Wythe County Community	9	8
Planning District 3 Total	**64**	**67**
Giles Memorial Hospital	6	0
Montgomery County Hospital	14	14
Pulaski Community Hospital	6	6
Radford Community Hospital	19	19
Planning District 4 Total	**45**	**39**

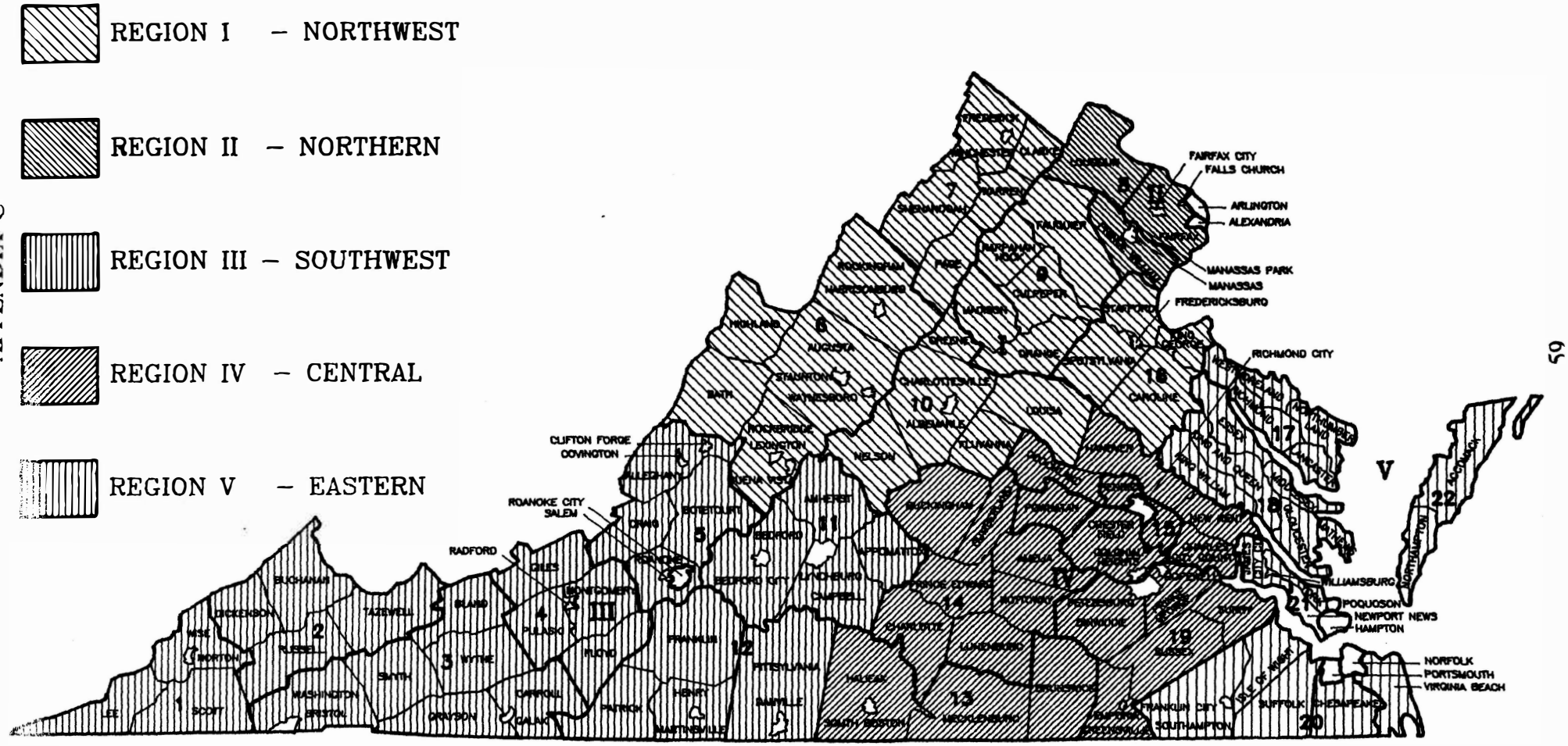
Alleghany Regional Hospital	13	12
Community of Roanoke Valley	30	30
Lewis-Gale Hospital	25	25
Roanoke Memorial Hospitals	35	35
Planning District 5 Total	**103**	**102**
Bath County Community	2	2
King's Daughters	9	8
Rockingham Memorial	27	27
Stonewall Jackson	6	6
Waynesboro Community	15	15
Planning District 6 Total	**59**	**58**
Shenandoah County Memorial	10	10
Warren Memorial	10	10
Winchester Memorial	33	28
Planning District 7 Total	**49**	**44**
Culpeper Memorial	8	8
Fauquier Hospital	12	12
Planning District 9 Total	**20**	**20**
Martha Jefferson	19	19
University of Virginia	30	30
Planning District 10 Total	**49**	**49**
Bedford County Memorial	12	11
Virginia Baptist Hospital	38	38
Planning District 11 Total	**50**	**49**
Franklin Memorial Hospital	11	11
Memorial Hospital, Martinsville and Henry	28	28
Memorial Hospital-Danville	25	32
R.J. Reynolds - Patrick County Memorial	6	6
Planning District 12 Total	**70**	**77**

Community Memorial Hospital	13	13
Halifax-South Boston	15	15
Planning District 13 Total	**28**	**28**
Southside Community Hospital	19	19
Planning District 14 Total	**19**	**19**
Chippenham Hospital	32	32
Henrico Doctors Hospital	34	34
Medical College of Virginia	74	81
Richmond Memorial Hospital	46	34
St Mary's Hospital-Richmond	35	35
Planning District 15 Total	**221**	**216**
Mary Washington	25	25
Planning District 16 Total	**25**	**25**
Rappahannock General Hospital	8	8
Planning District 17 Total	**8**	**8**
Planning District 18 Total	**0**	**0**
Greensville Memorial	10	10
John Randolph Hospital	10	10
Southside Regional - Petersburg	30	30
Planning District 19 Total	**50**	**50**
Chesapeake General	20	20
Depaul Hospital	28	32
Louise Obici Memorial Hospital	28	28
Maryview Hospital	17	17
Norfolk Community	16	16
Norfolk General	36	66
Portsmouth General	31	31
Southampton Memorial	17	17
Virginia Beach General	36	36
Planning District 20 Total	**229**	**263**

Hampton General Hospital	28	28
Mary Immaculate Hospital	16	16
Newport News General	8	0
Riverside Hospital	37	37
Williamsburg Community	17	14
Planning District 21 Totals	**106**	**95**
Northampton - Accomack	10	10
Planning District 22 Totals	**10**	**10**
VIRGINIA TOTALS	**1461**	**1506**

* Source: 1985 State Medical Facilities Plan
** Source: Center for Health Statistics: Virginia Department of Health

COMMONWEALTH OF VIRGINIA
HEALTH DISTRICTS AND HEALTH REGIONS



Health Regions Are Groups Of Planning Districts, And Planning Districts Embrace One Or More Health Districts. The Heavy Lines In The Map Identify The Health Districts, The Numbers The Planning Districts. Planning Districts 5, 8, 12, 15, 20, And 21 Are Those With Multiple Health Districts. Colonial Heights Is Attached To The Chesterfield Health District Although A Part Of Crater Planning District 19.

SOURCE: Virginia Department Of Health