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Local Public Health Priorities from the 1998 North Carolina Community Diagnosis

by

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ABSTRACT

Objectives: The purpose of this study is to summarize the major findings from the local health departments' community assessments from the 1998 Community Diagnosis cycle. The public health budget categories deemed most in need of legislative action by the local health department directors and the programmatic priorities that counties have identified as targets of local interventions are described in this report.

Methods: The methods that local health departments use to carry out their community assessments vary greatly from county to county, but generally involve the collection and analysis of data from a variety of sources. To summarize assessment findings, each local health department provides the SCHS two reporting forms: the Legislative Priorities Form, which is used by the State Health Director to help determine public health's expansion budget funding requests to the legislature, and the Community Health Action Plan, which outlines each county's programmatic health priorities and the corresponding proposed interventions.

Results: The most frequently reported Legislative Priorities were health promotion/health education, chronic disease, family planning, child health, and dental health. The top programmatic priorities from the Community Health Action Plans were teen pregnancy, diabetes, cancer, infant mortality, and STD-HIV/AIDS. Additional analyses show regional trends as well as changes in priorities from the 1996 Community Diagnosis cycle.

Conclusions: New directions for community health assessment in North Carolina include creating more local public/private partnerships for assessing local health needs and promoting collaborations with Healthy Carolinians task forces. Broader involvement of community groups and citizens in the community health assessment process should build more commitment for community-based health improvement initiatives.

Introduction

Community Diagnosis is a state-mandated health assessment process designed to help local public health professionals assess their community's health status and develop strategies to address local needs. In this effort, the State Center for Health Statistics (SCHS) prepares 100 county-specific *County Health Data Books* and an accompanying *Guide for a Community Diagnosis*. Each *Data Book* contains available county-specific and state-level data. These data consist mainly of traditional epidemiologic indicators and sociodemographic information. The *Guide Book* provides step-by-step instructions for organizing and interpreting health statistics, tools for collecting and analyzing local data, and community health planning guidelines and worksheets. The results of these assessments are used to plan public health programs and policy and to determine funding requests to the legislature.

Community Diagnosis has been administered biennially by the State Center for Health Statistics since 1974. Typically, local health department staff have assumed full responsibility for carrying out these assessments. This is because periodic assessment of community health status is required as a service that local public health agencies must perform in order to receive funds from the State. However, recent changes affecting public health have led some health departments to collaborate with other local agencies and organizations, especially Healthy Carolinians task forces, in assessment activities. Nonetheless, the results of the State's community assessment process continue to play a major role in local health department program planning as well as influence North Carolina's public health legislative agenda.

This study summarizes the major findings from the local health departments' community assessments from the 1998 cycle. In particular, the public health budget categories deemed most in need of legislative action by the local health department directors are discussed in this report. Also presented in this study is a summary of the programmatic priorities that counties have identified as targets of local interventions.

Method

The methods that local health departments use to carry out their community assessments vary greatly from county to county. Some local health agencies focus exclusively on the secondary data that are provided by the SCHS, whereas others supplement these statistics with data from local surveys, interviews, and focus groups. In addition, some local health departments rely only on staff members to carry out their assessment, whereas others involve a wide variety of representatives from other agencies and organizations within the community.

The SCHS supports these assessment activities in several ways. First, the SCHS provides training videoconferences to acquaint state and local public health professionals with the Community Diagnosis process, reporting requirements, and the *Guide for a Community Diagnosis* and the *County Health Data Book*. Also, statisticians at the SCHS respond to special requests for data and information. Finally, staff at the SCHS, as well as the Regional Health Education Consultants within the Office of Healthy Carolinians/ Health Education, provide on- and off-site consultation.

Although the collection of primary data has always been encouraged as part of the community assessment process, the 1998 cycle was the first cycle in which the SCHS provided tools for doing so. In particular, three tools have been developed by the SCHS to assist communities with the collection of primary data: "The Community Health Opinion Survey," "Guidelines for Conducting Focus Groups," and "The Inventory of Community Health Resources." "The Community Health Opinion Survey" is a questionnaire that local groups can use as-is or modify to collect data directly from the community. This survey assesses the perceived health care needs, problems, concerns, and risk behaviors of local residents. A tabular worksheet and a data entry program written in Epi Info software have been developed to aid communities in organizing and summarizing the results. Records indicate that 28 out of the 86 local health departments used this survey instrument in their 1998 assessments. The "Guidelines for Conducting Focus Groups" was designed to help local groups plan and carry out focus groups with members of the community. "The Inventory of Community Health Resources" was developed as a guide for cataloging information on existing local health resources and supportive services to facilitate coordination of the community's resources.

To summarize the findings of the Community Diagnosis process, each local health department provides the SCHS two required reporting forms: the Legislative Priorities Form and the Community Health Action Plan.

Using the Legislative Priorities Form (see Appendix A), each Local Health Department Director assigns 100 points among a range of health-related categories to indicate the extent to which each area is in need of legislative action. These categories correspond with the line items of the state health budget. The results of these forms are used by the State Health Director and representatives of the Local Health Directors' Association to determine the expansion budget for public health program funding requests to the legislature.

The Community Health Action Plan (see Appendix B) specifies the major diseases, risk behaviors, and conditions that the community plans to address and related measurable objectives. The plan's format requires specification of the planned interventions and the corresponding local agencies and organizations that have been charged with implementing each intervention. The plan describes the resources necessary and available as well as anticipated barriers to implementation. In addition, the plan indicates how the impact of each intervention will be evaluated.

In addition to these two forms, most counties submit a Community Diagnosis Document. These documents typically describe in narrative form the county's current health status, and discuss specific and quantifiable goals (i.e., process and outcome indicators) for each health problem identified. Also, many of these documents expand on the Community Health Action Plan by describing the steps needed to implement and evaluate each intervention and the community resources that will be used in tackling each health issue.

Results

The following summarizes the findings from the Legislative Priorities Form and the Community Health Action Plans.

Legislative Priorities

A summary of the Local Health Directors' legislative priorities for 1998 are displayed in Table 1. Note that these data have been calculated for 77 out of the 86 local health agencies. Eighty-one different legislative priority reports were received, with some districts sending in a separate report for each county. The first column shows the total number points allotted to each category, the second column illustrates the mean number of points per county within each category, and the third column indicates the number of counties that have assigned any number of points to each category.

As can be seen, health promotion/health education topped the local health directors' legislative agenda, with a mean number of 12.2 points and 81 percent of the reporting counties indicating a need in this area. Second was chronic disease, with a mean number of 11.2 points and 74 percent of the counties reporting need in this area. Third was family planning, with a

Table 1
1998 Public Health Legislative Priorities

	Total Number of Points	Mean Number of Points per County	Number of Counties Reporting
Health Promotion/ Health Education	992	12.2	66
Chronic Disease	905	11.2	60
Family Planning	759	9.4	57
Child Health	713	8.8	54
Dental Health	650	8.0	51
Space and Facility Needs	608	7.5	35
Communicable Disease	596	7.4	53
Maternal Health	591	7.3	47
Primary Care	378	4.7	31
Food, Lodging, Water, and Other Sanitation	341	4.2	37
Other	317	3.9	9
Health Statistics/Community Assessment	259	3.2	29
On-Site Sewage and Wastewater Disposal	216	2.7	25
Transportation	206	2.5	24
Recruitment/Retention of Staff	205	2.5	20
Migrant and Refugee Health Services	173	2.1	22
WIC Services	93	1.1	16

Note: These data have been calculated for 81 legislative priority reports.
Source: N. C. Center for Health Statistics

mean number of 9.4 points and 70 percent of the counties allocating points to this category. Further information broken out by four major regions of the State (eastern, central, western, and urban) is available upon request to the State Center for Health Statistics.

To examine the extent to which these priorities have changed from the last assessment cycle, data from the 1996 Legislative Priorities Form are shown in Table 2. These data are directly comparable to the 1998 data, because the same form was used in both of these years. As can be seen, space and facility needs, which topped the list in 1996, dropped down to the sixth position in 1998. In fact, in 1998, space and facility needs received less than half of the number of votes that it received in 1996. Health promotion/health education, which was the number two priority in 1996, moved to the top spot in 1998. Another notable change was the movement of dental health from fourteenth in 1996 to the fifth spot in 1998 – an increase of approximately threefold in points allocated.

Table 2
1996 Public Health Legislative Priorities

	Total Number of Points
Space and Facility Needs	1,468
Health Promotion/Health Education	1,374
Chronic Disease	900
Communicable Disease	898
Child Health	737
Family Planning	719
Maternal Health	533
Primary Care	514
Food, Lodging, Water, and Other Sanitation	452
Recruitment/Retention of Staff	442
On-Site Sewage and Waster Water Disposal	431
Health Statistics/Community Assessment	416
Migrant and Refugee Health Services	229
Dental Health	221
Transportation	217
WIC Services	142

Source: N. C. Center for Health Statistics

Community Health Action Plan

The most frequently reported priorities from the Community Health Action Plans are shown in Table 3. Priorities indicated by only one county are not included. These priorities represent each county's programmatic priorities and are based on the community's analysis of the health status, risk behaviors, perceptions, and resources of local residents. In contrast to the Legislative Priorities, the priorities listed on the action plans are not selected from a larger list of categories. Rather, local health agencies are free to define each priority and to nominate as many as they want. Each priority must include a description of what interventions will be developed to address the problem.

As can be seen in Table 3, the number one reported priority for the 1998 cycle was teen pregnancy. Diabetes was the second highest priority, followed by cancer, infant mortality, and STD-HIV/AIDS. These items have not been modified from the way they were originally described in the counties' action plans.

To explore the degree to which these priorities have changed from the preceding cycle, the top ten priorities from the counties' 1996 assessment are displayed in Table 4. The top priority in 1996, teenage pregnancy, remained the same in the 1998 cycle. Diabetes rose from sixth in 1996 to second in 1998, whereas heart disease dropped from a tie for first to sixth during the same period. Cancer, infant mortality, and STD-HIV/AIDS remained in the top five priorities during both of these cycles. In general, the same set of health problems resided at the top of the list for both 1996 and 1998, though in slightly different orders.

To further examine these data, the 1998 reports were re-analyzed by four regions: eastern, central, western, and urban. The urban counties reflected the 10 most populous counties in the state. The 90 remaining counties were divided into three equal groups of 30 based on location and placed into the eastern, western, and central categories. The urban counties were split from the other counties because they are more similar to each other in terms of public health and health care issues compared to neighboring rural counties.

Regional priorities were often consistent with what the health statistics show to be major problems:

- Dental health, maternal smoking, and diabetes topped the list for the western counties. These priorities also are reflected in secondary data for these counties. For example, the western part of the state has the highest number of decayed, missing, and filled baby teeth per child. Moreover, compared to

Table 3
1998 Community Health Priorities

Public Health Priority Area	Number of Counties Reporting
Teen Pregnancy	27
Diabetes	26
Cancer – All Types	22
Infant Mortality	21
STD-HIV/AIDS	18
Cardiovascular Disease	17
Heart Disease	17
Dental Health	16
Risk Behaviors	12
Motor Vehicle Accidents	12
Substance Abuse	12
Water System Contamination	12
Access to Care	11
Maternal Smoking	11
Unintentional Injuries/Safety	10
Availability/Quality of Care for Elderly	8
Tobacco Use	8
Breast Cancer	7
Pneumonia and Influenza	7
Chronic Diseases	6
Late/Inadequate Prenatal Care	6
Suicide	6
Child Preventive Services/Safety	5
Family Planning	5
Hypertension	5
Intentional Injuries and Violence	5
Maternal Risk Factors	5
Cost of Health Care	4
Lack of Use/Knowledge of Services	4
Low Birth Weight	4
Prostate Cancer	4
Rabies	4
Stroke	4
Asthma	3
Child Fatalities	3
Communicable Disease	3
Health Department Facility Needs	3
Lack of Physical Activity	3
Lack of Preventive Health Services	3
School Health	3
Cervical Cancer	2
Child Immunizations	2
Child Injuries	2
Domestic Violence	2
Food Borne Illnesses	2
Health Disparities Among Minorities	2
Indoor Air Quality	2
Lead Poisoning	2
Low or Later WIC Enrollment	2
Maternal Hypertension	2
Needs of Hispanic Population	2
Outdoor Air Quality	2
Transportation	2
Tuberculosis	2

Source: N. C. Center for Health Statistics

Table 4
1996 Top Ten Community Health Priorities

	Number of Counties Reporting
Teen Pregnancy	31
Heart Disease	31
Infant Mortality	28
Cancer – All types	26
STD-HIV/AIDS	22
Diabetes	16
Chronic Diseases	14
Communicable Diseases	13
Unintentional Injuries/Safety	13
Breast Cancer	11

Source: N. C. Center for Health Statistics

the other three sets of counties, the western counties have the highest percentage of live births to mothers who smoked during pregnancy.

- Teen pregnancy, diabetes, heart disease, and substance abuse received the most nominations for central counties. Again, these priorities are reflected to some extent in available data. For example, the teen pregnancy rate (ages 15 to 17) is high for the central counties compared to the remaining counties in the state.

- For the eastern counties, diabetes, cancer, and infant mortality were given the most votes. In terms of corresponding mortality data, the eastern counties have the highest diabetes, cancer, and infant death rates in the state.

- STD-HIV/AIDS and infant mortality were the most frequently nominated priorities for the urban counties. Relative to the rest of the state, urban counties have the highest AIDS death rate. Out of the 480 AIDS deaths that took place during 1997, over half (249) occurred in the ten urban counties. Further, the infant mortality rate is higher for urban counties than for either central or western counties.

More regional data on health priorities are available on request.

One difficulty in interpreting data from the Community Health Action Plans deals with the level of specificity or generality with which local health departments choose to report their priorities. For example, one county may report heart disease, another cardiovascular disease, and still another chronic disease – yet each of these counties may intend to address basically the same health issue. To remedy this issue, Table 5 shows the detailed priorities (of which there were originally 108) from Table 3 reclassified into 14 broad topic areas. This analysis provides a better picture than Table 3 regarding the extent to which certain program areas have been identified repeatedly by counties as high priority.

Table 5
1998 Priorities from the Community Health Action Plans by Broad Topic Area

	Number of Nominations within Priority Area
Women and Infant's Health	89
Chronic Diseases	81
Intentional and Unintentional Injuries	39
Lifestyle Factors	38
Cancer	37
Communicable Disease	30
Child Health	23
Access to Care	22
Environmental Health	20
Aging	16
Dental Health	16
Social Issues	11
Cross-Cultural Issues	5
Coordination of Services	3
Other	2

Source: N. C. Center for Health Statistics

As can been seen in Table 5, when regrouped into broad categories, women and infant's health issues rose to the top. The most frequently nominated issues in this category were teenage pregnancy, infant mortality, and maternal smoking. Second was chronic diseases. Most of the concerns in this group dealt with diabetes and cardiovascular diseases. Intentional and unintentional injuries ranked third. Motor vehicle injuries, residential and recreational injuries, suicide, homicide, and violent crime were the top priorities in this broad grouping. Lifestyle factors emerged as the fourth highest priority area. The majority of concerns in this group dealt with tobacco use, alcohol abuse, and lack of proper nutrition and physical activity.

Discussion

Findings from the Legislative Priorities Form indicated two categories that Local Health Department Directors have considered consistently to be in need of legislative action – health education/health promotion and chronic disease. These two areas of need topped the Legislative Priorities list in 1998 and were ranked in the second and third places in 1996. Other priorities, however, showed a great deal of change during this time period. For example, dental health rose from the fourteenth position in 1996 to fifth in 1998, indicating an increasing perception of need for legislative action in this area. In contrast, space and facility needs dropped from first to sixth during the same time span.

Regarding the Community Health Action Plans, it is interesting to note that lifestyle factors emerged as a high priority in the regrouped list. Traditionally, chronic and communicable diseases have topped this list. To some extent, this increasing emphasis on lifestyle changes could be due to the primary data collection tools (see discussion above) that were introduced in the 1998 *Guide for a Community Diagnosis*. Many of the health departments that surveyed the local residents or held focus groups identified lifestyle issues, rather than diseases, as a priority. The behaviors that fall into this category represent risk factors for frequently nominated diseases on health departments' action plans, such as cardiovascular disease, cancer, and diabetes.

The analysis of regional trends revealed some simi-

larities across the different regions of the State. For example, teenage pregnancy appeared as one of the top five concerns noted in the Community Health Action Plans for each region. The regional analyses also indicated some differences. To illustrate, the western counties were the only set of counties to have dental health in the top five reported priorities, whereas the urban counties were the only group to rank both risk behaviors and STD-HIV/AIDS in the top five. In contrast, for both the eastern and central counties, all of the top priorities corresponded to morbidity and mortality measures that are recorded in North Carolina's vital statistics (e.g., cancer, heart disease, infant deaths).

Anticipating the Future

Since its inception in 1974, Community Diagnosis has played a central role in state- and local-level program planning and policy making. The size and complexity of this process continues to grow as the public health system evolves. Several major changes are occurring that will strengthen the ability of communities to understand and address local health problems. These changes are in part the result of an ongoing project to reshape the state-wide community health assessment model. This project, known as the North Carolina Community Health Assessment Initiative, involves the collaboration of the State Center for Health Statistics and the Office of Healthy Carolinians.

One focus of this "new" model is on creating local public/private partnerships for assessing local health needs, rather than on placing full responsibility for this process on local health departments. In particular, the goal of this model is to get health department personnel to combine forces with local Healthy Carolinians task forces to identify and address health problems within the community. It is hoped that such local cooperation will increase awareness and "ownership" of public health problems and programs, and will build commitment to community-based health improvement initiatives.

As the result of this shift toward public-private, multi-agency involvement, community members also are encouraged to take on a larger role in the community assessment process. This model emphasizes direct citizen participation in community health analysis. It encourages a grass-roots or bottom-up decision-making process, rather than a top-down health planning approach, where "experts" determine the community's health priorities and promotion agenda. Community Diagnosis should not be done *on* the community, but rather *by* the community.

Appendix A

PUBLIC HEALTH LEGISLATIVE PRIORITIES

Please indicate your county's top priorities for expansion budget purposes. You have 100 points to allocate among the categories shown. You may choose to give one category most of your points to indicate a strong need, or you may split your points between many categories.

_____ Child Health
Includes: Adolescent Health Services, Child Service Coordination, Genetic Services, School Health Services, Services to Developmentally Disabled Children, Sickle Cell Services, Well Child Services, Immunization

_____ Chronic Disease
Includes: Monitoring, Treatment, Early Detection, and Referral for AIDS, Arthritis, Cancer, Cholesterol, Diabetes, Epilepsy, Glaucoma, Heart Disease, Hypertension, Kidney Disease and Stroke

_____ Communicable Disease
Includes: AIDS/HIV Prevention and Control, Sexually Transmitted Disease Control, Immunization, Tuberculosis Control, Rabies Control, Epidemic Investigations, and other Communicable Disease Programs

_____ Dental Health
Includes: Community Water Fluoridation, Dental Health Education and Promotion, Sealant Application and Promotion, Dental Treatment, School Fluoride Mouthrinse, Dental Screening and Assessment Services

_____ Family Planning
Includes: Contraceptive and Fertility Services, Preconceptional Counseling, Teen Pregnancy Prevention

_____ Food, Lodging, Water, and Other Sanitation
Includes: Restaurant, Lodging and Institution Inspections, Bedding Control, Lead Abatement, Pest Management, Water Sanitation and Safety, Milk Sanitation, Private Water Supply, Swimming Pool Inspections, Shellfish Sanitation

_____ Health Promotion and Risk Reduction/Community Health Education
Includes: Injury Control, Lifestyle Behavior Modification, Nutrition Counseling, Occupational Health, Health Education

_____ Health Statistics, Assessment of Health Status and Needs, and Vital Events Registration
Includes: Vital Records, Health Statistics Collection and Analysis, Community Diagnosis and other local needs assessment processes

_____ Maternal Health
Includes: Maternity Care Coordination, Prenatal and Postpartum Care, SIDS Counseling

_____ Migrant and Refugee Health Services
Includes: Migrant Health, Refugee Health, Interpreter Services

_____ On-site Sewage and Wastewater Disposal

_____ Primary Care

_____ Recruitment/Retention of Staff

_____ Space/Facility Needs

_____ Transportation

_____ WIC Services
Includes: WIC Services for Women, WIC Services for Children and Infants

_____ Other (Please Specify) _____

Appendix B

Community Health Action Plan

Problem: _____

Goal: _____

Suggested Actions	By Whom?	By When?	Resources & Support Needed/Available	Potential Barriers or Resistance	How Success Measured?
What needs to be done?	Who will take action?	By what date will the action be done?	What financial, human, political, & other resources are needed & available?	What individuals & organizations might resist? How?	What events or data can be used to determine if the problem is being corrected?

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