



Maine Public Health Nursing Program

Annual Report 2004

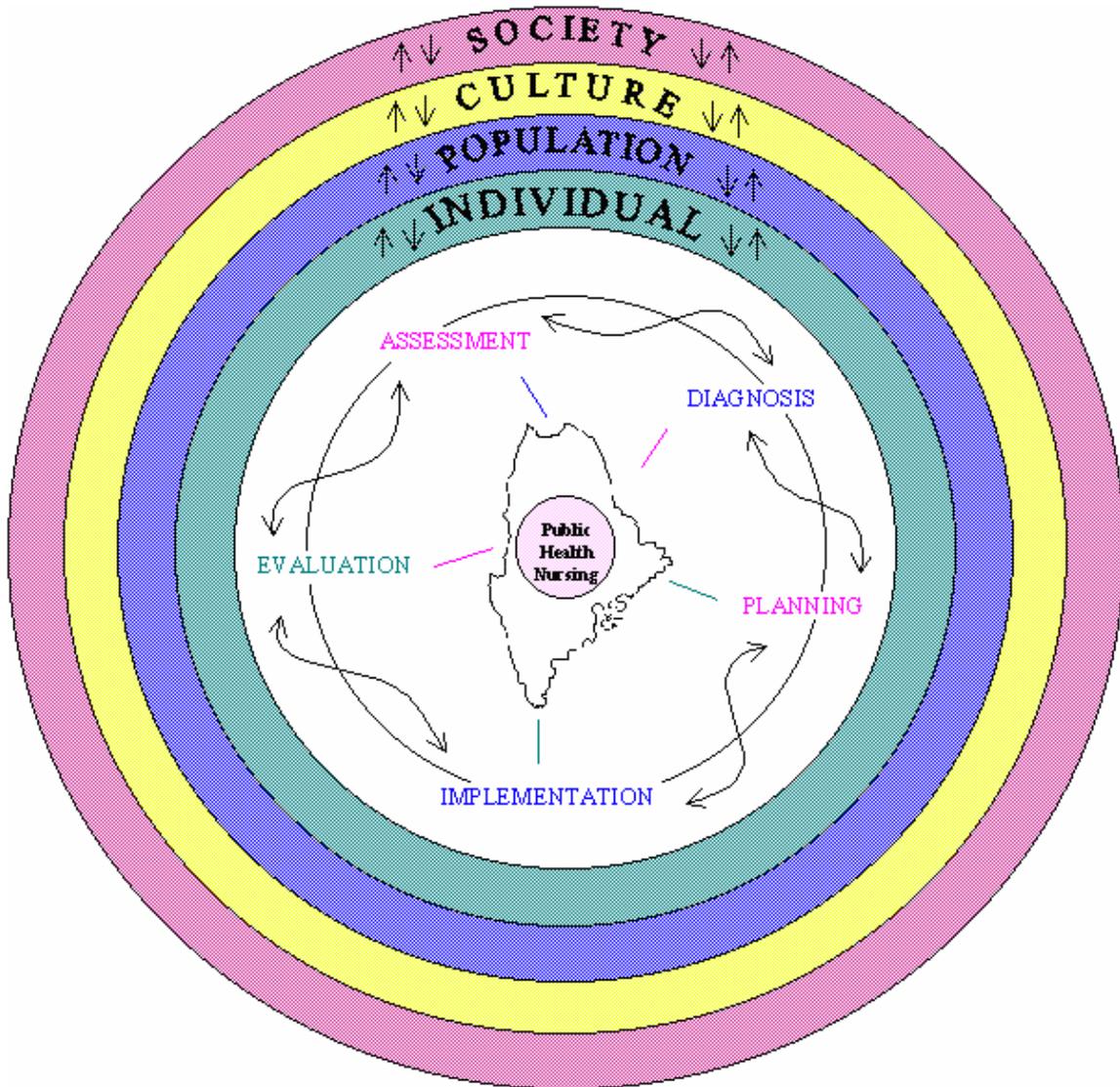
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State of Maine
Department of Health and Human Services
Bureau of Health
Public Health Nursing
Conceptual Model



Public Health Nurses are the centerpieces of a work force that will move health forward in preserving and protecting the health of the public. Using nursing theory, research and practice to assess, diagnose, plan, implement and evaluate, the Public Health Nurse continually interacts within an open system with the individual, the population, the culture and society.

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Annual Report 2004
Maine Public Health Nursing Program

Purpose of the report

This report provides an overview of the activities of the Department of Health and Human Services (DHHS), Bureau of Health (BOH), Public Health Nursing (PHN) program covering the calendar year of 2004. This report is made available to program staff, other BOH and DHHS personnel, interested parties and stakeholders. It provides information about PHN services provided, its varying activities, demographic information about the clients the program serves, and the outcomes from interventions.

Data for this report was obtained from the Carefacts System, a clinical documentation and information management system. All PHN field staff document all of their PHN services into this system. Additional PHN Management activities are not necessarily captured within this system.

Public Health Nursing Vision

Public Health Nursing: Leaders in assuring excellence in health.

Public Health Nursing Mission

Public Health Nursing provides expertise and leadership to improve the health of populations. Public Health Nursing accomplishes this by the following activities:

- Conducting Public Health Nursing standardized community assessments for use in determining Public Health Nursing interventions and disseminating assessment data to other Bureau of Health and community programs
- Case finding to locate individuals and families with identified risk factors, diseases, conditions, disorders, and connecting them with resources
- Participating in research as an independent Public Health Nursing project or in cooperation with Bureau of Health and other state programs, with local community initiatives, or with other professional initiatives
- Contributing to the ongoing research, review, and revision of the Omaha System, an international standardized nursing language
- Coordinating quality, affordable, and accessible resources for individuals, families and communities
- Advocating for community based initiatives
- Advocating for a safe and healthy environment
- Preventing and controlling epidemics
- Promoting healthy lifestyles
- Evaluating outcomes of public health services
- Participating in public health emergency preparedness activities
- Providing culturally appropriate health care services

Introduction

Public health is the science and art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts for the sanitation of the environment, the control of community infections, the education of the individual in principles of personal hygiene, the organization of medical and nursing services for early diagnosis and preventive treatment of disease, and the development of the social machinery for the maintenance of health.

Nursing is both an art and a science. It involves many different activities, concepts and skills that are related to health sciences, social sciences and other professions. It provides a unique contribution to health care throughout the life cycle by the utilization of physical, biological, and social sciences through the nursing process. Nursing has an impact on the individual, the family, the community and society, and is accountable to them for its practice.

Nurses as health care providers, interact with individuals, society and other disciplines to contribute skills, activities, and professional attitudes that will attain the highest level of wellness possible for all persons. The nurse is not only a provider of direct health care services but also a knowledgeable participant in social and political movements, which generate a realistic program of health care.

The science of public health and the practice of nursing have defined and redefined their joint role. Public Health Nursing has developed to meet the needs of society, seeking to ensure continuity of care and intervention in the ever-changing health care delivery system. Public Health Nurses assume multiple roles in protecting and promoting the health of the public. Since 1920 Public Health Nursing in the State of Maine has continually assessed and addressed the health of the individuals and the communities of the state. The State of Maine, Public Health Nursing is a synthesis of nursing theory and public health science.

Public Health Nursing was created as the Division of Public Health Nursing and Child Hygiene in the Maine State Health Department. At that time three goals were identified:

1. To save lives of mothers and children through education of parents and the public, and to provide preventative and corrective services in cooperation with physicians and concerned others
2. To set high standards for quality nursing work
3. To set high standards for nurse qualifications

As the program evolved the prevention and control of communicable diseases as well as expanded services for Maternal and Child Health and the Crippled Children's Services, now known as Coordinated Care Services, were added. Public Health Nurses functioned as the field nurses for many of the Bureau of Health programs and continue to do so today. Even though the program has continued to evolve, the essence of the original goals still exist as defined in the current law:

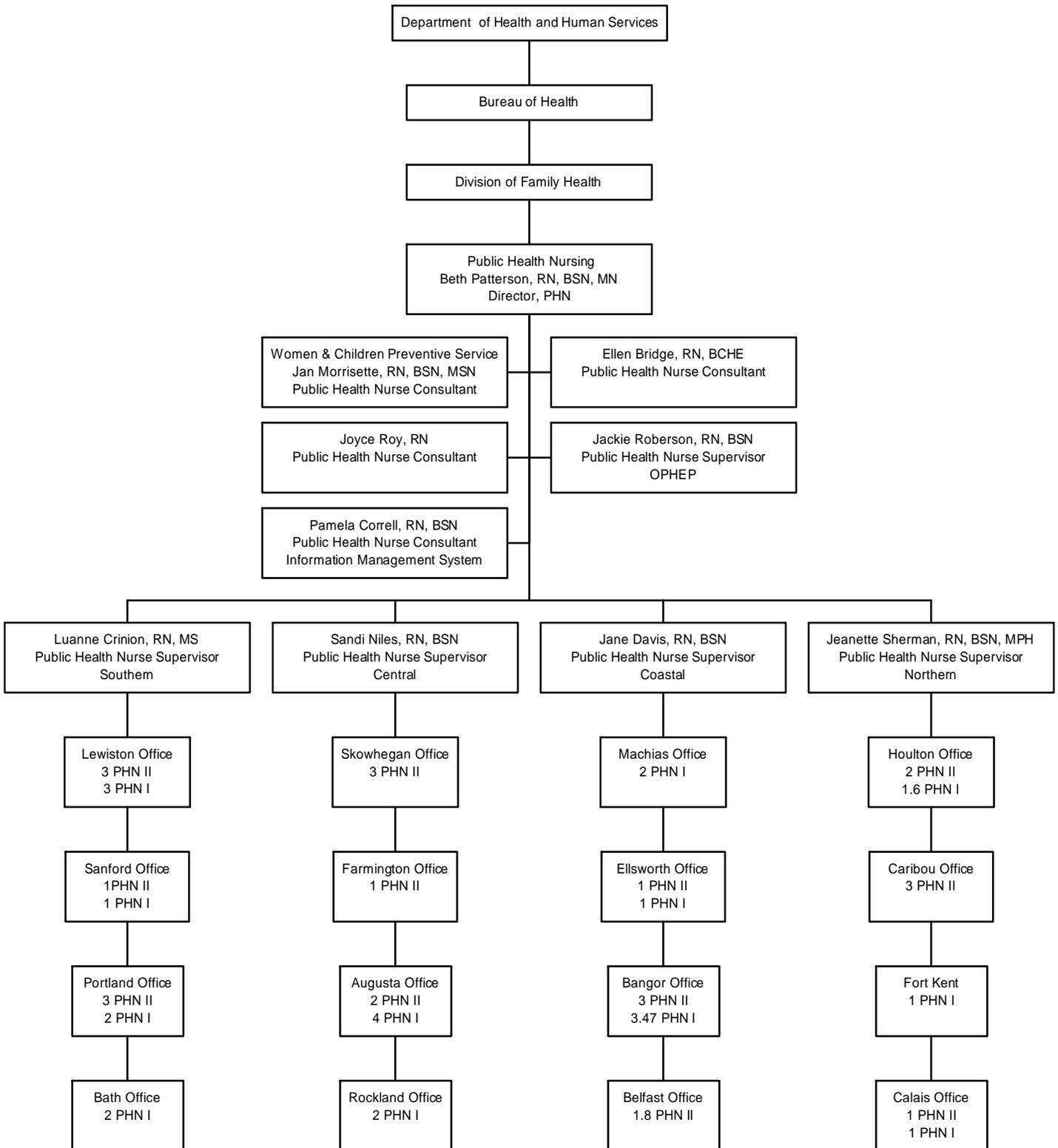
1. Establish and communicate standards
2. Provide nursing service
3. Provide technical assistance

Over the past 84 years Public Health Nursing has been a vital component of the Bureau of Health as well as the overall public health system in the State of Maine. Public Health Nursing in Maine has defined its role as assessing health status, defining health options, developing policies, and assuring access to services for individuals, families, and communities. This was accomplished by utilizing the nursing process of assessment, problem identification, planning, implementation, and evaluation. Services have been and continue to be population based, with a goal of disease prevention and health promotion. The program is in a continual process of defining and redefining those services.

Public Health Nursing services in Maine are provided in homes, clinics, schools, and other community and state settings. Public Health Nurses implement, promote and support other Bureau of Health programs.

The current PHN program, with 16 offices, provides services to the entire state of Maine and its citizens. All PHN staff, other than clerical support, are registered professional nurses. The following is a schematic of the program organizational representation for 2004.

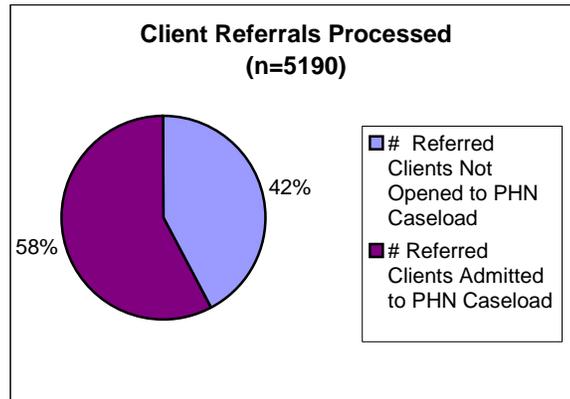
2004



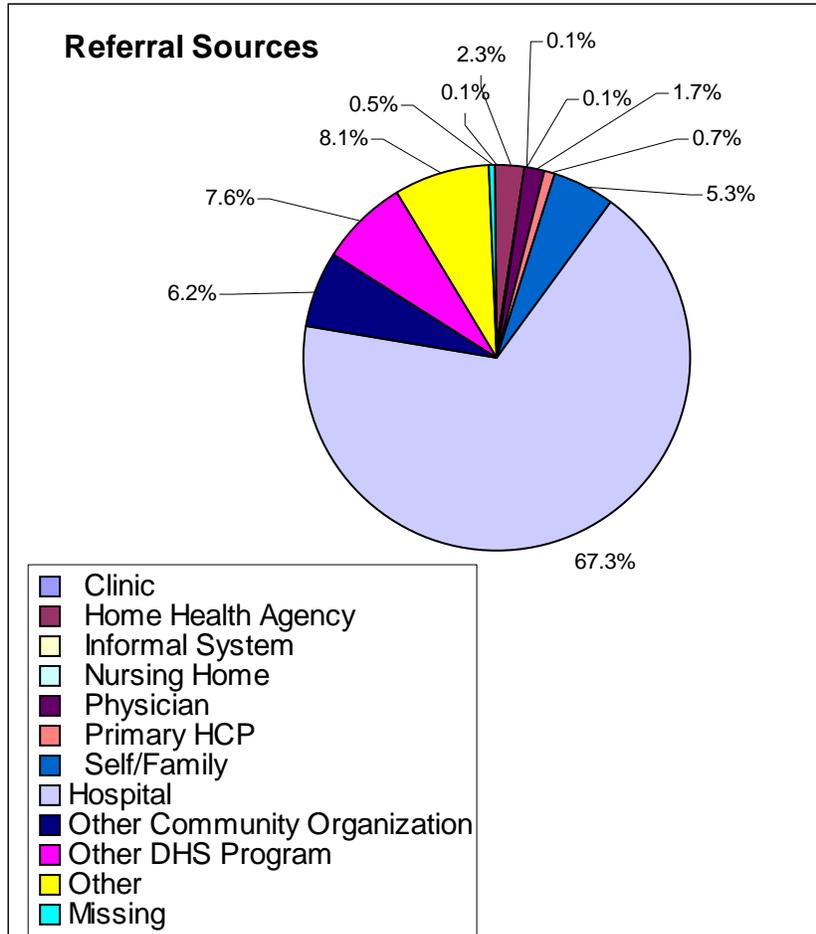
PHN Services to Individual clients

Referrals

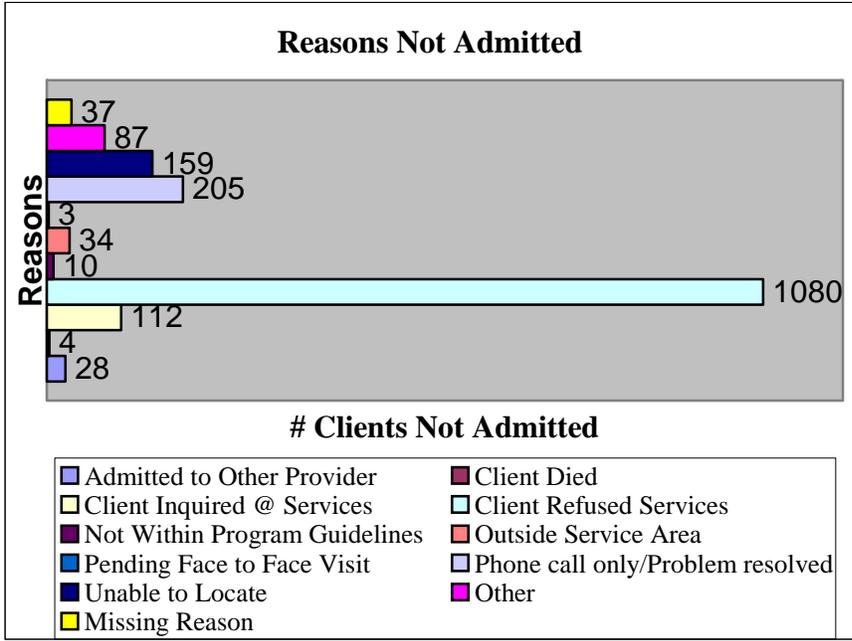
In 2004 PHN processed 5190 referrals from a variety of sources. Of these referrals 58% were admitted to PHN caseload and 42% not admitted. In the previous year, 6015 referrals were processed and 50% accepted services and 50% were not opened to services.



Referrals to the PHN program come from a variety of sources. Our largest referent remains hospitals at 67.3% of referrals.



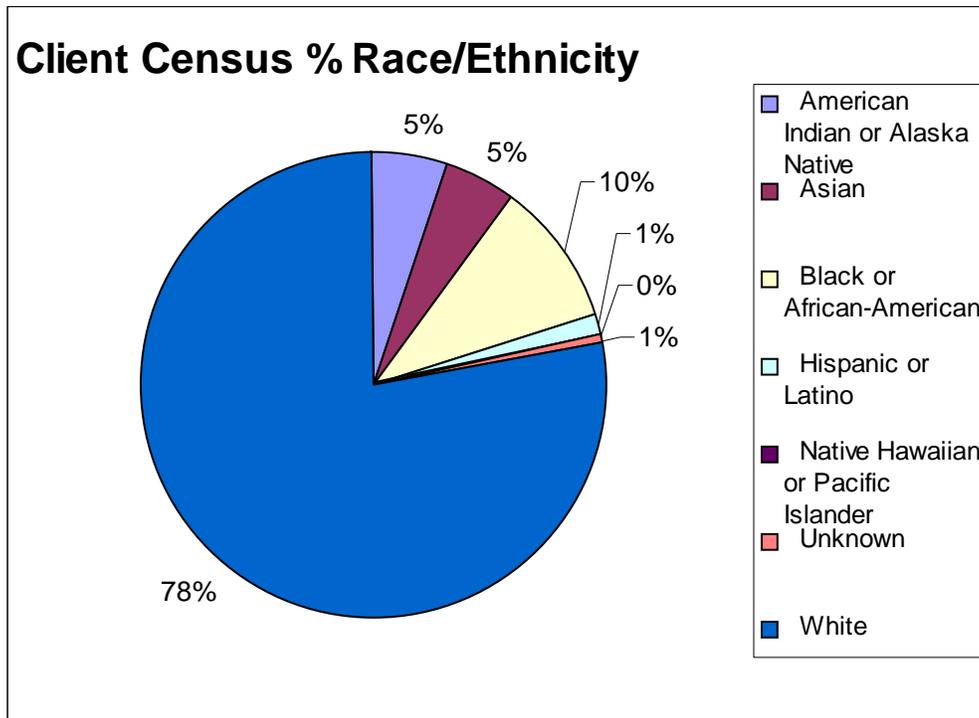
Reasons clients are not admitted for PHN services are captured in the graph below. The largest reported reason for not admitted to caseload is that of client refusal. The PHN QI process is reviewing this and a new central referral and intake process is being developed to address this reason for non-acceptance of services and to make the referral process easier for referents.



Although there was a 13.7% decrease in the overall number of referrals processed from 2003 there was an 8% increase in the number of referrals open to PHN caseload in 2004.

Client characteristics

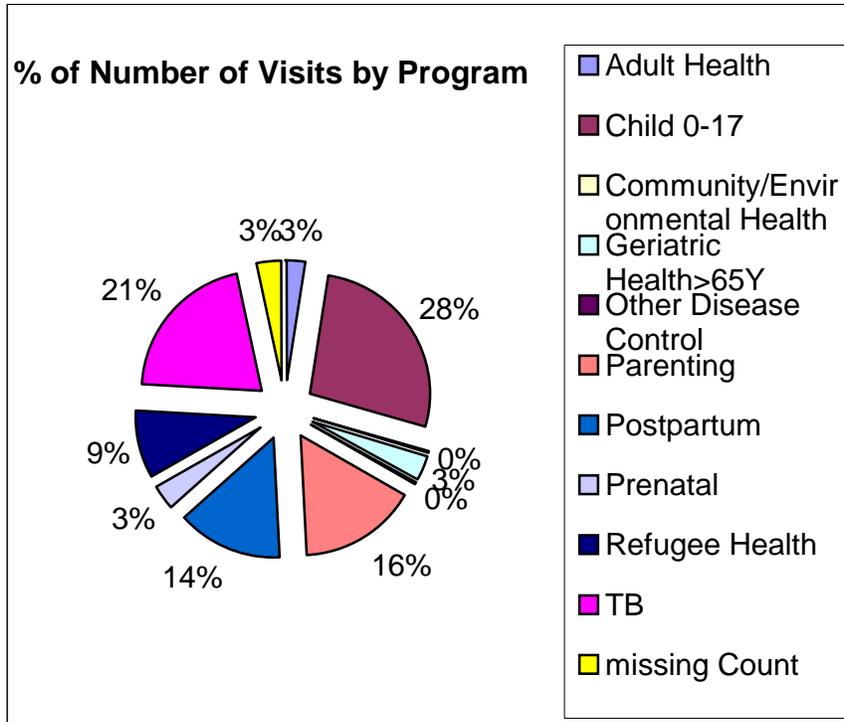
PHN continues to serve a culturally and ethnically diverse population.



n=4425 unduplicated client count

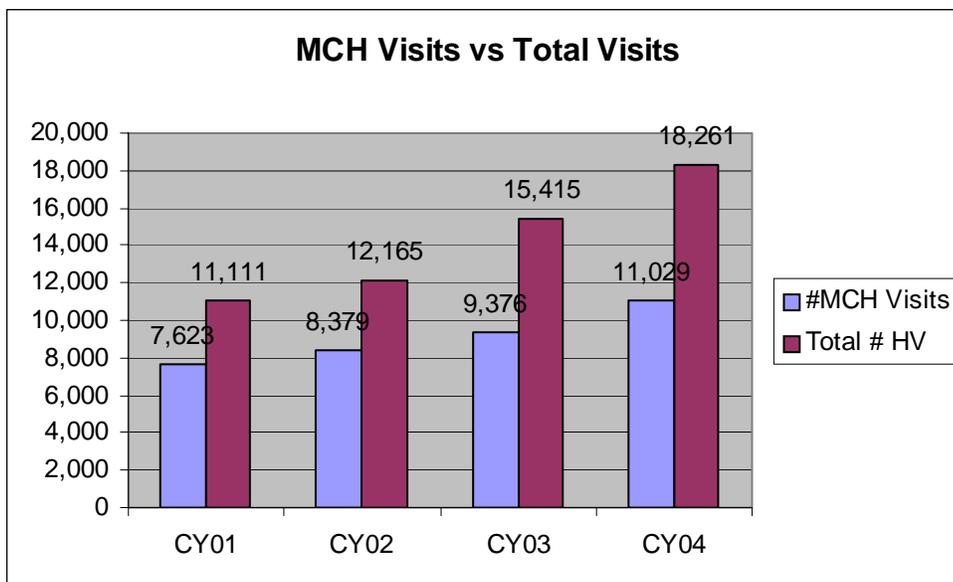
0% represents <1% in data

In 2004 there was an 18% increase in the number of visits provided to individual clients over 2003 for a total of 18,261 visits. Each client has his or her own individual chart. Every client receives a nursing assessment and has an individualized care plan developed with interventions to address client needs. Children 0-17 received the largest percentage of visits from PHN at 28% with TB following at 21%. The other two large categories were parenting at 16% and postpartum at 14%.



0% represents < 1% of data

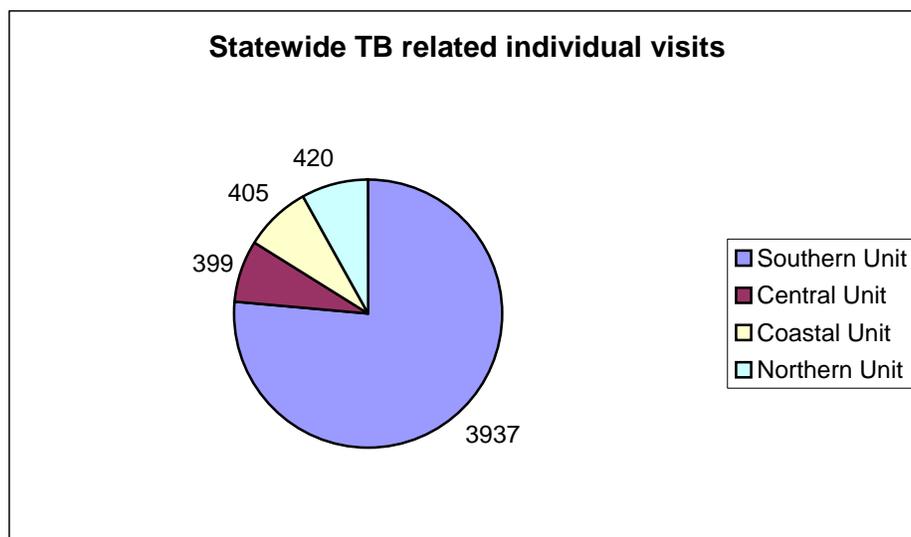
Public Health Nursing historically had been identified with serving primarily the Maternal and Child Health (MCH) population. As illustrated in the graph below PHN visits to the MCH population have increased in number and decreased in percentage over the last four years as other population groups receiving PHN services increased. The percentage of MCH visits to total visits – CY01 – 68.6%; CY02- 68.8%; CY03 – 60.8% and CY04 – 60.3%



Public Health Nurses follow-up on Tuberculosis (TB) related activities throughout the state. The activities include visiting clients who:

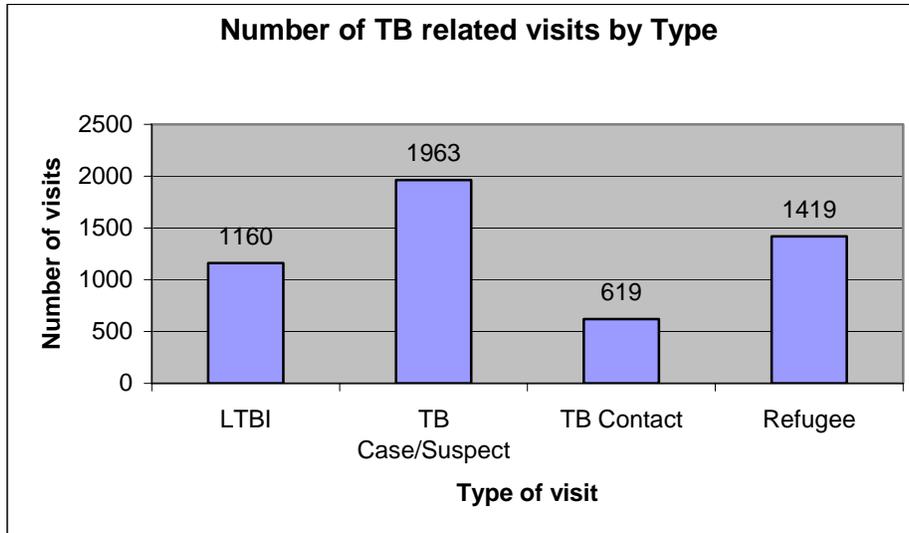
- have been diagnosed with tuberculosis
- are suspected of having tuberculosis
- are a close contact of another person who has tuberculosis
- have had a positive tuberculosis skin test (TST)
- are new refugees in Maine in need of a TST

There were 5,161 Public Health Nursing visits made to TB related clients for a 12-month period, December 1, 2003 through November 30, 2004. The nurses in the Southern region visited 76% of the TB related clients in the state. The visits made in the other three regions were at 8% each.

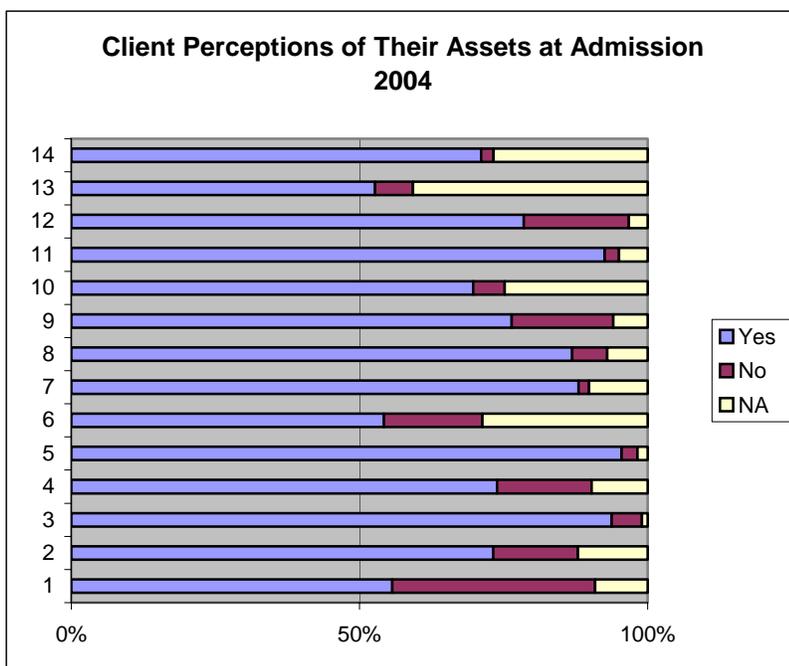


Daily visits are made to clients with a diagnosis of TB to monitor the client taking their prescribed medications. Most clients with active TB disease are on medication for 6 months. In addition to seeing clients with active TB disease, PHN also makes monthly visits to clients who have been infected with TB but do not have active disease. These clients are diagnosed as having Latent TB Infection (LTBI) and are at risk for developing TB later in their life if their health fails. People with LTBI may be on medication for 9 months to prevent development of active disease. Clients who are either contacts of TB cases or refugees (as part of their arrival process in the United States) are skin tested for TB infection and referred for further medical evaluation as indicated by the test results.

The graph below depicts the number of TB related visits by type made by our nurses.



During the initial assessment of each adult client an assets checklist is completed to establish a baseline and to assist the PHN in the development of the individualized plan of care for the client. The following chart depicts the clients' perception of their assets when they are admitted to PHN services.

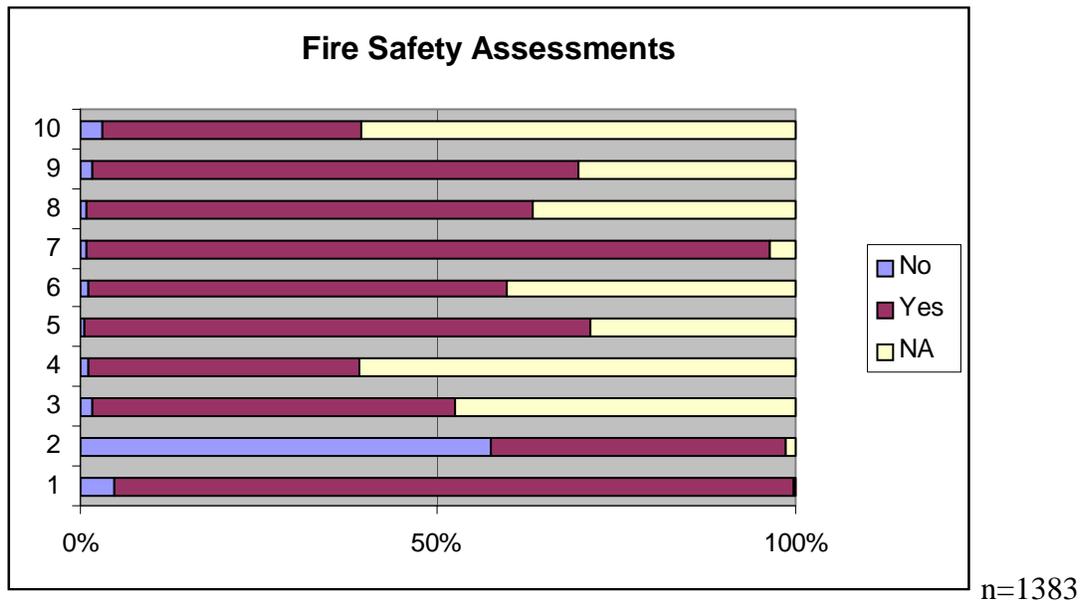


- 14. Knows Neighbors
 - 13. Current Immunization Status Known
 - 12. Knows How to Access Services
 - 11. Shows Self Care/Nurturing Behavior
 - 10. Has Supportive Friends
 - 9. Has Supportive Partner
 - 8. Has Supportive Family
 - 7. Has Goals/plans for future
 - 6. Utilizes Dental Care
 - 5. Utilizes Medical care
 - 4. Does Not Abuse Substances
 - 3. Has adequate Housing
 - 2. Income Covers Exp
 - 1. Has Child Care
- n=1538**

Conclusions:

- 35% do not have child care
- 18% do not know how to access services
- 18% do not have a supportive partner
- 17% do not have dental care

Also during the initial assessment of all primary clients, a fire safety checklist is completed by the PHN. Below are the results of this assessment in 2004.



- 10.If natural gas is smelt, it is reported
- 9.Flammable liquids stored away from heat
- 8.Grill used outside only
- 7.Electrical cords in good condition with no frays
- 6.All matches and cigarettes put out carefully
- 5.Lighted candles kept out of way from walls and curtains
- 4.Refrains from smoking in bed
- 3.Matches and cigarette lighters kept out of reach of children
- 2.Practices getting out in case of fire
- 1.Smoke detector exists with battery<1 year old

Conclusions: **57% do not practice getting out in case of fire**

Public Health Nursing Process

Omaha Standard Language

A standard language for nursing practice is required to meet the needs of the profession, the clients, and for nursing to be able to describe and evaluate its impact on patient outcomes and to generate reliable, useful and valid data. The research based Omaha Classification System (OCS) is one such classification system. It consists of nursing diagnosis/client problems, interventions and client outcomes. PHN has adopted the Omaha System to document its client care in Carefacts.

Documentation using the OCS facilitates tracking client trends and progress, billing, reporting to external accreditors, making management decisions, assessing staffing and scheduling needs, and fosters the inclusion of nursing information into national data sets. Our electronic documentation is able to produce data that describes our client outcomes. Their knowledge, behavior and status are measured upon admission and discharge.

Outcomes of PHN interventions

Knowledge = the ability of the client to remember and interpret information

Behavior = the responses, actions or activity of the client

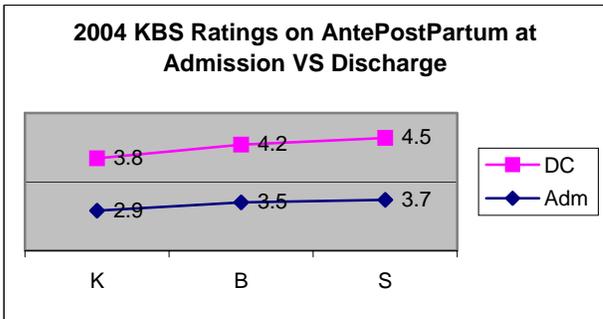
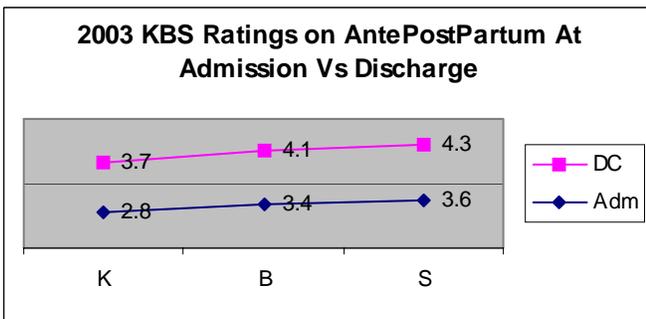
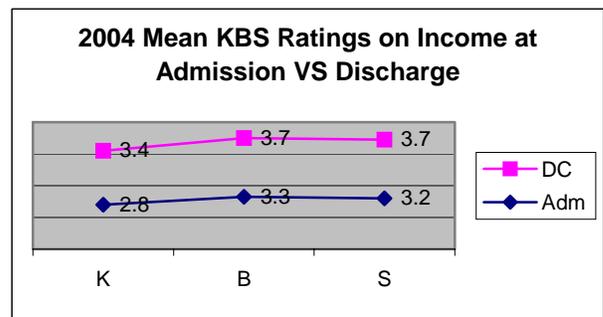
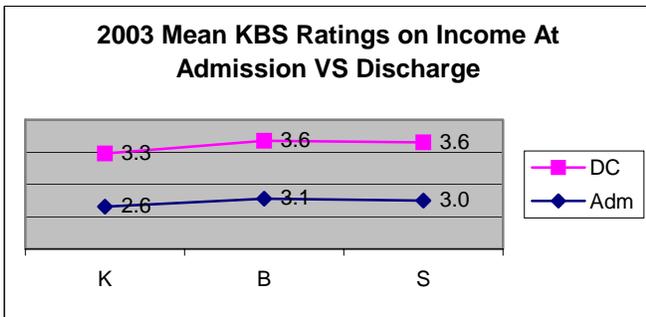
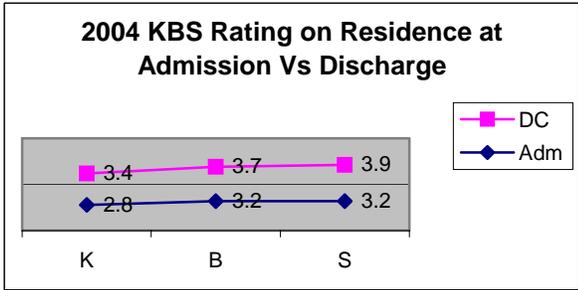
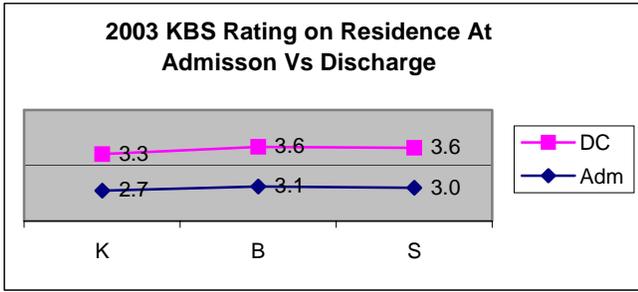
Status = the condition of the client

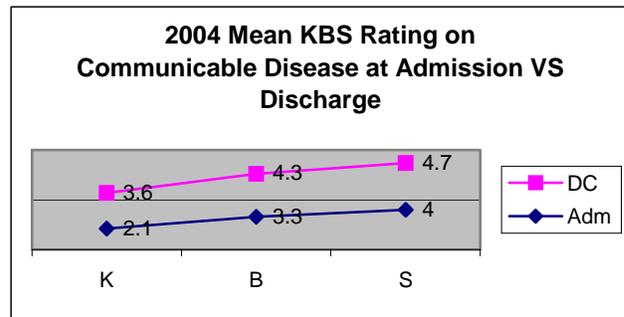
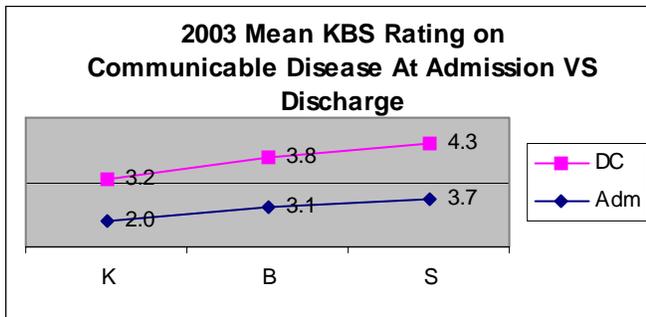
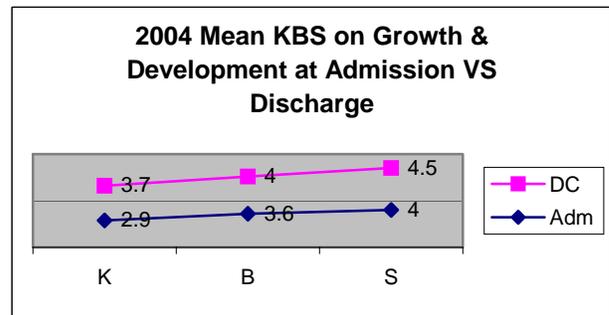
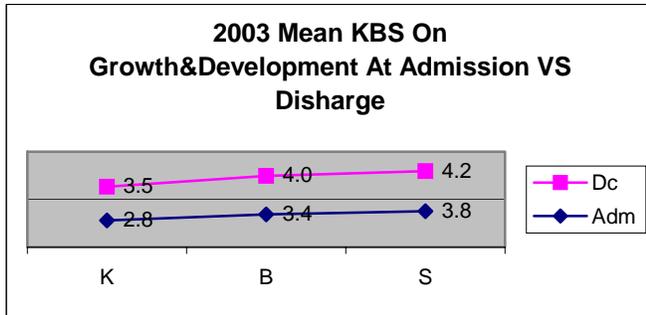
Ratings = numeric levels describing a problem from the worst to the best, with 5 being the best.

Each graph represents clients with the identified problem (nursing diagnosis) assessed upon admission and again assessed at discharge.

The problems are:

- **Residence** – the place where individual or family lives
- **Income** – monies from wages, interest, dividends, or other sources available to family for living and health care expenses
- **Antepartum/postpartum** – before or after childbirth
- **Growth and development** – progressive physical development and gradual maturation or progression as the individual moves through childhood to old age
- **Communicable disease** – conditions caused by infectious agents



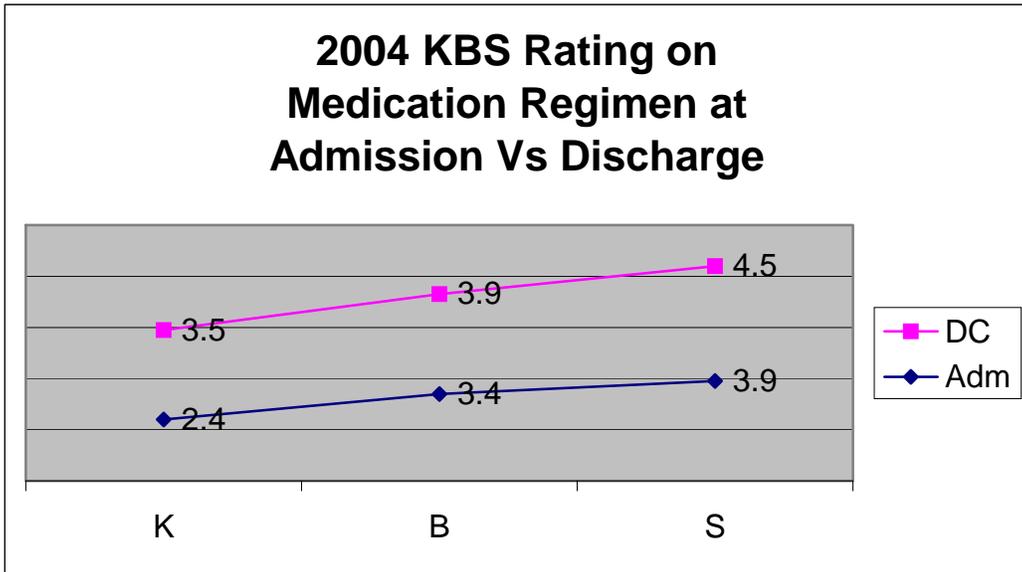


Conclusion:

The above graphs depict the progress that the client has achieved related to their knowledge, behavior and status relative to a particular nursing diagnosis. The comparison of two years continues to show that nursing intervention by PHN staff produces a positive outcome for clients.

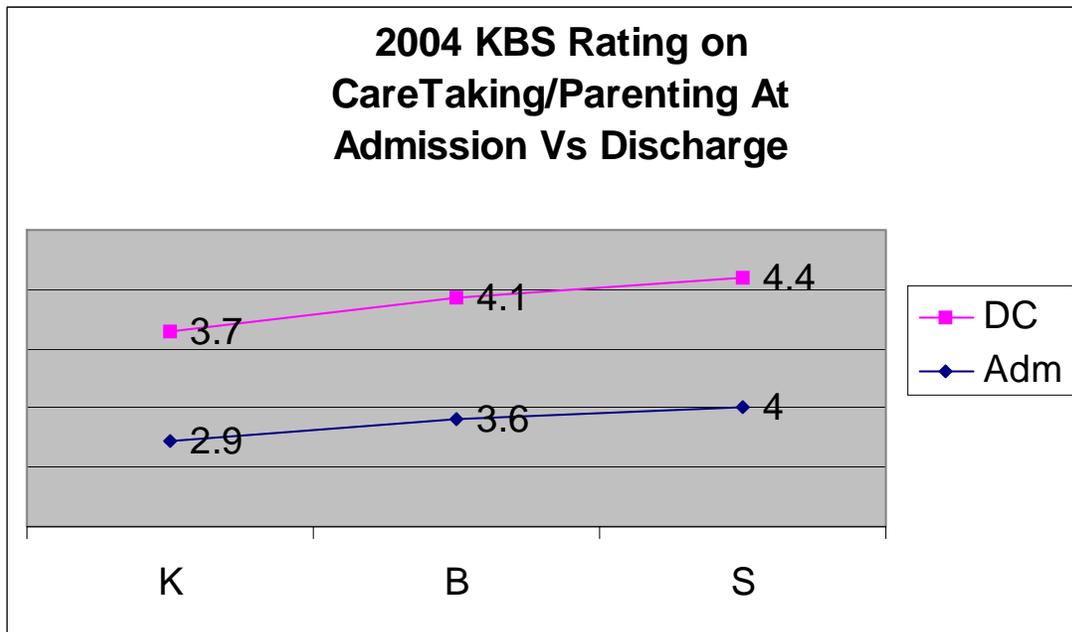
Three additional problems:

- **Prescribed medication regimen-** a regulated course for the use or application of medicines ordered by the physician
- **Caretaking/Parenting-** providing support, nurturance, stimulation and physical care for dependent adult or child
- **Health Supervision-** management of the treatment plan by a health care professional



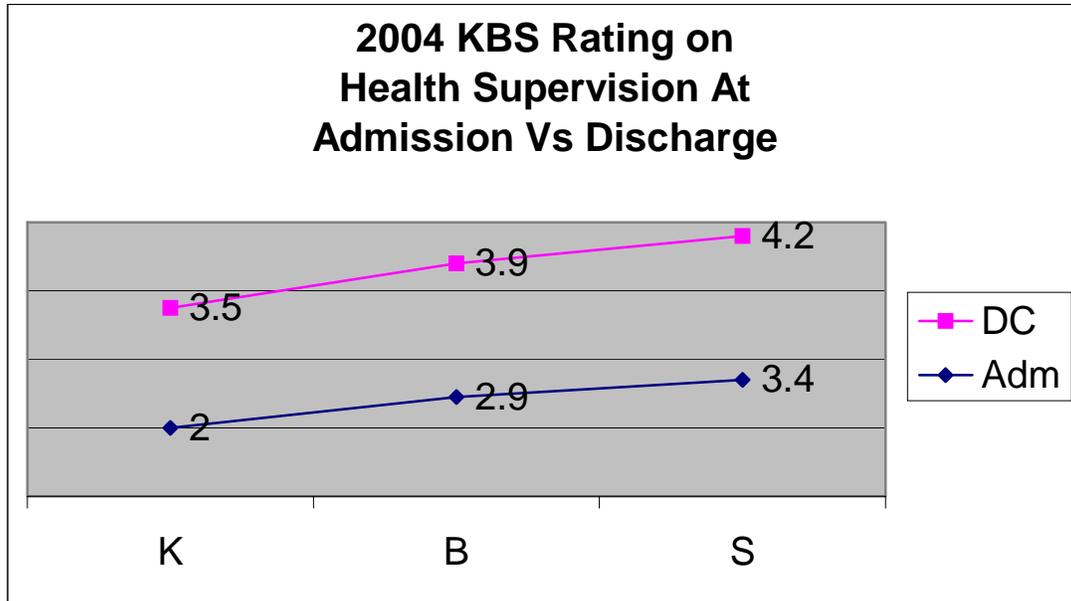
n=323

Three hundred twenty three clients were assessed with this nursing diagnosis. These clients are taking medications for acute TB, mental health or other chronic health conditions.



n=1074

These families have complex social, physical or emotional needs.



n=271

This problem represents work with refugees, adult and geriatric clients who are in need of professional nursing case management.

Conclusion:

The above graphs depict the process that the client has achieved related to their knowledge, behavior and status. The nursing interventions provided by PHN staff produce a positive outcome for clients.

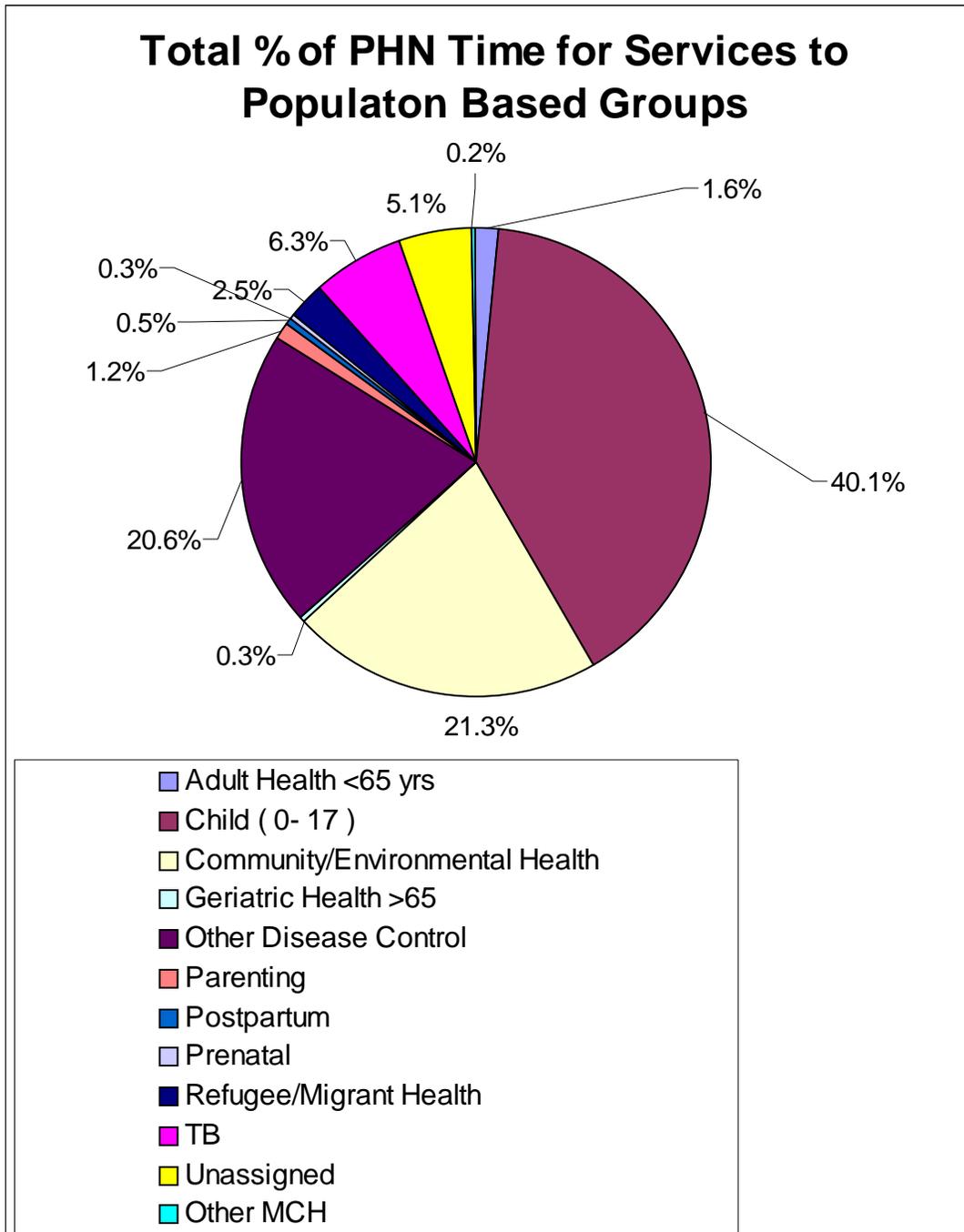
Population Focused PHN Services

Over 39% of PHN time is spent in providing population focused services to groups of people. Examples of these services include immunization clinics, Early Periodic Screening, Diagnosis and Treatment (EPSDT) follow up, and conducting Clinical Assessment Software Application (CASA) assessments.

The following chart depicts the percentage of time spent in these services by program:

- 40.1% of PHN time is in the Child program
- 21.3% to Community/Environmental Health
- 20.6 % to Other Disease Control
- 6.3% Refugee/Migrant Health
- 5.1% to TB program

PHN attributes the service time to 12 distinct programs within our software.

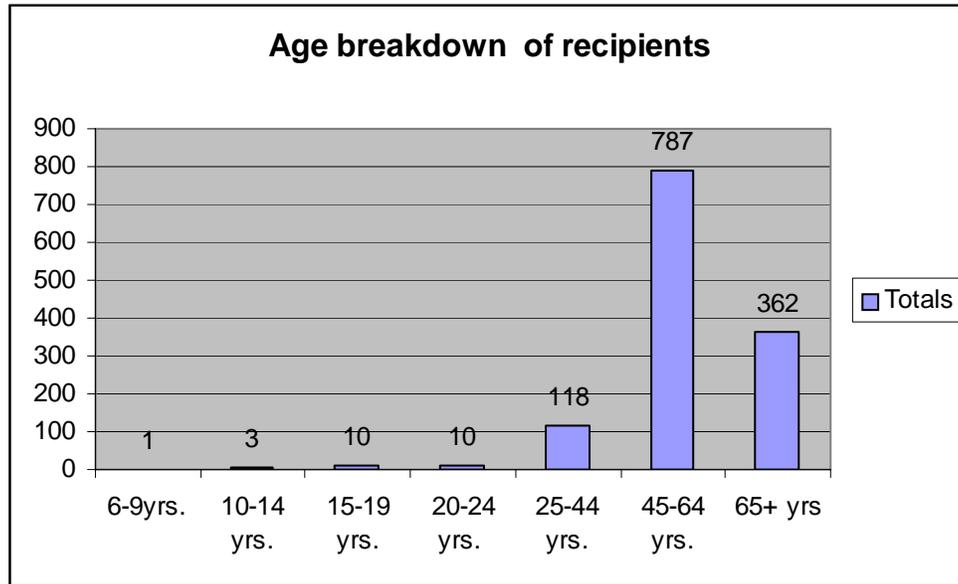


The following is a further description of some of the population focused PHN services.

Influenza Immunization Clinics

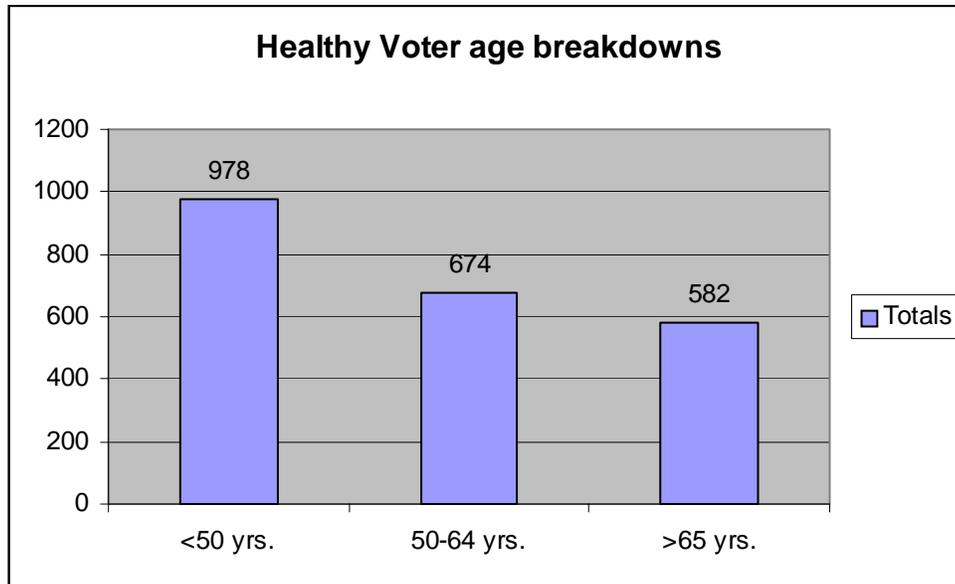
Public Health Nursing faced a challenging 2004 influenza immunization season. The initial plan was to provide influenza immunizations to state employees in collaboration with Employee Health Benefits and Anthem as done in the past few years. When the nationwide vaccine shortage became apparent Public Health Nursing responded by releasing their vaccine to the Maine Immunization Program to be

used for the high-risk population of the State. In a collaborative effort within the Bureau of Health, Public Health Nursing sponsored public influenza immunization clinics for Maine's at risk population. Clinics were set up in 8 locations across the state. At these clinics 1291 citizens received influenza vaccine in December. Eighty nine percent of recipients were over the age of 44. Further immunization efforts were planned for January 2005.



Robert Wood Johnson Foundation Grant

Public Health Nursing also participated in another influenza immunization initiative. PHN successfully applied for a Robert Wood Johnson Foundation (RWJF) demonstration grant to organize, promote, and implement influenza vaccination clinics within easy reach of voting activities – the **Vote and Vaccinate** Initiative. RWJF awarded 15 grants nationwide with Maine Public Health Nursing being one of the recipients. Clinics were planned at 8 polling sites across the State of Maine on Election Day, November 2, 2004. Due to the nationwide shortage of influenza vaccine these activities were modified to a **Healthy Voter** Initiative focusing on preventive health education with information on ways to stay healthy during the flu season and additional information on adult immunizations.



Surveys (n=2269) were completed by participants at the polling sites to gather demographics and interest in influenza immunization clinics at polling sites next year. Fifty-two percent of respondents received a flu shot in the previous year. There was an overwhelming majority (92%) expressing an interest in having a flu shot clinic at their polling place next year.

Public Safety Hep B Project

Public Health Nursing entered into a contract with the Department of Public Safety to provide pre-exposure prophylaxis Hepatitis B immunizations to public safety staff. During 2004, two hundred twenty-eight doses of Hepatitis B vaccine were administered and 81 individuals completed their series of immunizations. PHN plans to continue to work collaboratively with the Department of Public Safety in assisting them to meet the OSHA standards for Hepatitis B immunizations for their personnel.

CASA Project

Public Health Nursing, under an agreement with the Maine Immunization Program (MIP), continues to audit assigned medical care practices in Maine to assess the 2 year old immunization rates for the state as well as to assess and to offer education related to the storage of vaccines supplied by the MIP. For 2004, 100 medical provider practices received a full CASA audit, which included both a review of records as well as a Vaccine for Children (VFC) assessment. An additional 144 practices received a VFC assessment and education related to the handling of vaccines. A total of 244 medical practices were visited by 1 or more of the 20 PHN staff nurses and 1 supervisor who worked on this project.

EPSDT Outreach Project

Public Health Nursing works in collaboration with the Bureau of Medical Services and the Maine Immunization Program to provide to children and families, after a well child visit to a medical care provider, follow-up services that assist with needed referrals and appointments addressing the child's

medical, oral health, and developmental needs. In 2004, PHN made 3,222 contacts via telephone calls and letters accounting for 2,300 hours of staff time. This collaborative effort involves 14 PHN staff nurses. Over the past year the contacts have reflected an increase in the complexity of health issues and family needs addressed by the PHN staff involved with the project.

All PHN staff is involved with the EPSDT outreach in the follow-up of referrals for home visiting that allow for a more in-depth delivery of services.

EPSDT Triage Project

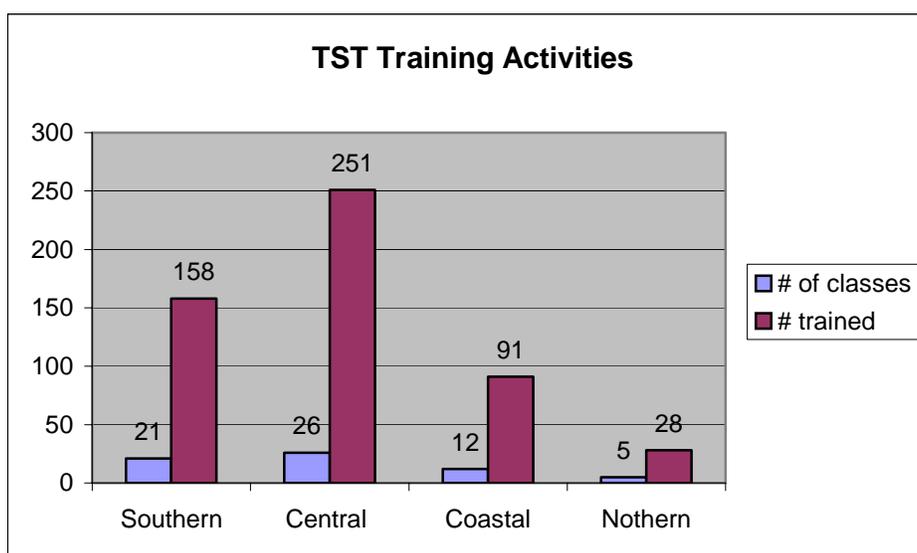
Beginning August 1, 2004, PHN entered into an agreement with the Bureau of Medical Services to review and to triage all of the Bright Future Periodicity forms (BF19) generated from medical provider practices for a periodicity well child visit for all children who are recipients of MaineCare and who are birth through 21 years of age. One PHN staff person is primarily responsible for the daily triage, and receives support back up from 2 additional PHNs on an as needed basis.

For the months of August through December of 2004, 27,178 BF19 forms were reviewed and sorted into categories for follow-up, no further follow-up, or home visitation services. This accounted for 350 hours of PHN staff time.

TST Training Activities

Public health nurses present trainings to educate other nurses, medical assistants, physician assistants and respiratory therapists how to properly place and read TST. The trainings give an overview of TB disease and infection, reasons for doing targeted testing, as well as giving the participant an opportunity to place a skin test and read results.

This chart illustrates the unit breakdown of the 64 workshops held for the 528 people trained during the 12-month period.



One Quality Improvement (QI) Initiative

Client Satisfaction Survey

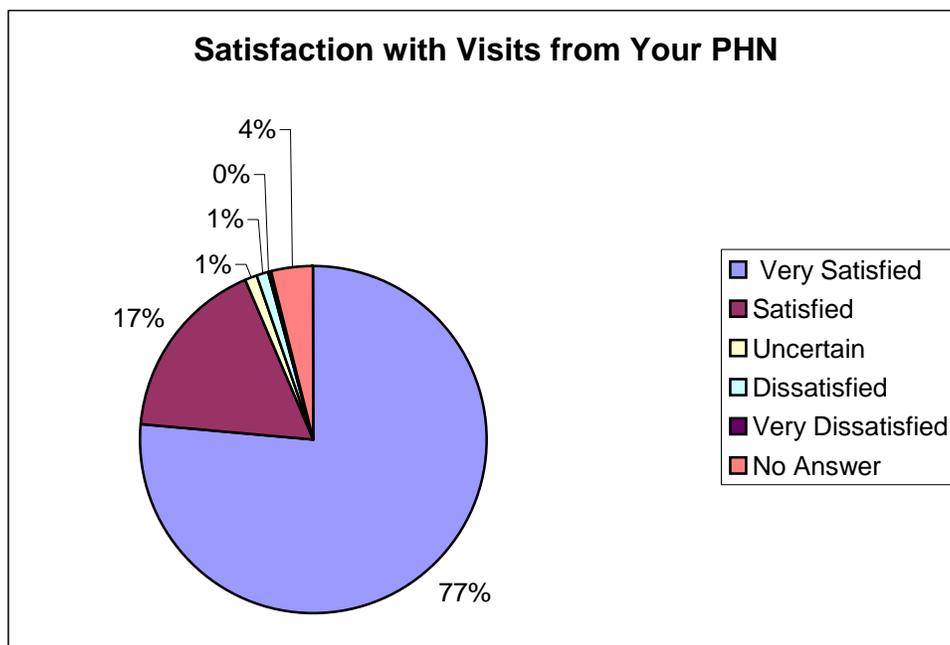
PHN has been sending a Client Satisfaction Survey to all of our English proficient clients upon discharge for the past 4 years.

During the 2004 fiscal year:

- 1075 surveys were sent out
- 345 were returned
- 32% return rate was obtained

Of the individuals who returned the survey:

- 94% of the individuals who returned the survey were either satisfied or very satisfied with the visits that they received from their PHN
- 94% is a 2% increase from 2003
- 87% stated that they would use the services of PHN again
- 96% stated that they would recommend this service to others



n=346 0% represents <1

PHN uses the results of this survey in program planning and policy development. In

the event that trends are identified which are of concern, the QI Committee charters a QI Team to research the issue and develop plans to improve our practice.

New Initiatives

Public Health Nursing Supervisor/Strategic National Stockpile Coordinator

Public Health Nursing and the Office of Public Health Emergency Preparedness worked collaboratively for several months to redesign a vacant PHN line and in November 2004 hired a PHN (Jackie Roberson, RN, BSN) as Supervisor/Strategic National Stockpile (SNS) Coordinator. The position is jointly funded with 25% of time being spent with Public Health Nursing management duties while 75% of work will focus on work developing the SNS plan for the State of Maine. One initial focus area has been working with the Maine State Board of Nursing to develop the Maine Volunteer Nurse Corps. The vision of this initiative is to mobilize volunteer nurses to assist with Public Health Emergencies by utilizing their experience and training to assist in mass immunization clinics and/or to support large medication dispensing efforts. In addition, collaboration and coordination has continued developing a statewide system that will allow deployment of a defined set of pharmaceuticals for use in public health emergencies in advance of any such emergency. These pharmaceutical assets will include drugs from several sources and taken together will be known as the Medical Emergency Distribution System (MEDS) of Maine program. The PHN Supervisor functions as part of the Public Health Nursing management team and has focused on policy and management issues, attending regularly scheduled meetings and participating in special projects. This newly created position will continue to pose interesting challenges while affording a great opportunity to utilize existing resources enhancing collaborative work practices within the Bureau of Health.

Central Referral

The need to develop a central referral process was identified both by Public Health Nursing staff and our clients. In the satisfaction surveys clients indicated the need for a more timely response to their request for nursing services. Data indicated the amount of time spent by each of our public health nursing staff in responding to referrals decreased the amount of time spent in providing services to our clients. A literature search was done and an expert from the largest homecare agency in Maine presented information to PHN management. In December 2004 six offices were presented the model for statewide Central Referral and at that time staff provided their input regarding the application of this process.

Vision Statement: All clients have access to appropriate and timely health care resources.

Goals of Central Referral:

- A Unified Agency Approach
- Identification of Health Needs of Referrals
- Providing Support for the Staff

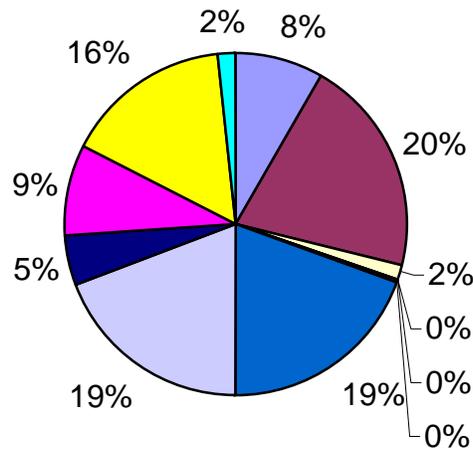
Initial plans for the project:

- One Contact Site for Statewide Referrals

- More efficient processes, maximizing staff time for client care and case management
- Single Access Point
- Skilled Professional Screening
- Consistent standardized approach to services targeting client needs
- Determination and prioritization of client needs

Summary

Total % of PHN Time for Visits to Individuals and Population Based Services



- Adult/Geriatric
- Child (0- 17)
- Community/Environmental Health
- Genetics
- Other Disease Control
- Other MCH
- Parenting
- Postpartum
- Prenatal
- Refugee/Migrant Health
- TB Control
- Unassigned

The preceding chart summarizes some of the data aspects of PHN services by program in 2004.

Contributions to the Omaha Classification System

Throughout 2004, Maine Public Health Nurses expanded their expertise in the daily use of the Omaha System. These efforts have not only advanced field clinical practice and programmatic goals in Maine, they have also contributed to the ongoing, international development of the Omaha System itself. During 2003 and 2004 Maine Public Health Nurses participated in field tests for proposed revisions to the Omaha System. With the help of Maine field data, critical revisions were made to this standardized, nursing classification system in 2004. These revisions are reflected in the 2005 publication of, “The Omaha System-A Key to Practice, Documentation, and Information Management,” authored by Karen S. Martin. This new book, referenced by nurses internationally, acknowledges the Maine Public Health Nursing Program for its contribution to these revisions, as well as including a Maine case study.

Also in 2004, the Public Health Nursing Program became the first lead agency for the Public Health Virtual Users Group of CareFacts™ software customers nationwide. This opportunity will enable the program to contribute directly to the growing body of Nursing Informatics science and promote electronic documentation enhancements that will allow Public Health Nurses to serve Maine citizens more efficiently.

Future Directions

Public Health Nursing remains focused in the central roles of assessment, surveillance, policy development and leadership, health promotion, and disease and injury prevention. In a health care system that is evolving, redefining, and changing, Public Health Nursing in Maine is prepared to be a vital organization now and in the future. It shall continue to work toward finding the most efficient and cost effective ways to organize and to deliver services in a geographically large, rural state. Maine’s Public Health Nursing program is committed to ensuring that nurses shall be leaders whose skills encompass a wide range of necessary characteristics. Flexibility and preparedness for expanded capacity shall ensure the delivery of services.

In addition to these principles Public Health Nursing will continue to contribute to research in the revision of the Omaha Classification System through application, documentation and direct involvement in language revisions.

In order to meet the highest level of standards Public Health Nursing will be pursuing national accreditation.