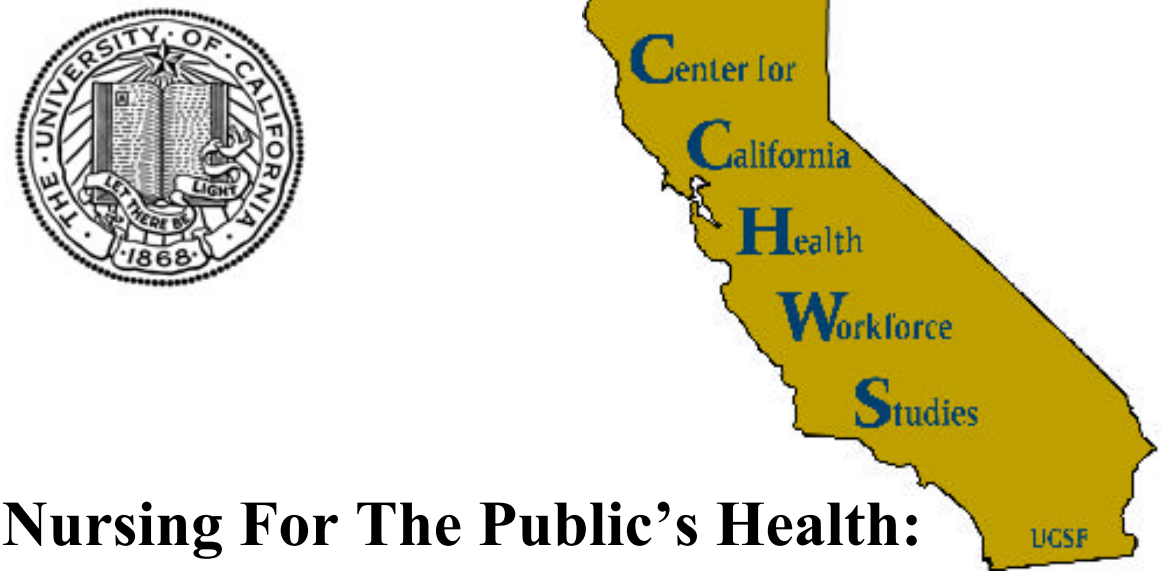

Nursing For The Public's Health: A Profile of Public Health Nurses in Five California Counties

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Acknowledgments

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EXECUTIVE SUMMARY

Public health nurses (PHNs) make up the largest group of public health workers and are important health care providers for a variety of underserved populations, yet data about PHN demographics and practice are limited. Information about the PHN workforce in California can be useful for projecting future trends, shaping nursing education, and guiding public health practice.

PHN practice is defined as focusing on population health issues rather than the provision of direct care to individuals. However, some nurse educators and employers have expressed concern that PHNs have not received sufficient education in population health and public health principles. In addition, health systems' need to attract patient care revenue may lead to an emphasis on individually-focused clinical interventions rather than population-focused interventions.

This report provides data on the demographics of the PHN workforce in five counties in California; the educational preparation of the PHN workforce; the job market and employment issues for the PHN workforce; and the scope of PHN practice. Although the study was limited to five counties, these counties span a wide range of geographic areas in the state and are representative of the types of PHN systems in many California counties. Major findings of the survey are summarized below.

Demographics

- Many PHNs are nearing retirement age. Fewer people are entering the nursing profession, and those that enter nursing often do so at a later age. Like nursing in general, PHN is likely to be affected by a shortage of nurses in the near future.

Education

- Licensure as a PHN in California requires completion of an approved BSN program or documentation of public health coursework, and unlike the general RN workforce, most PHNs are educated at the baccalaureate level or above in nursing.

Job Market

- The majority of PHNs have been in the profession for more than 15 years, have had only one employer during their careers, and express satisfaction with their jobs. This compares favorably with findings from other research that job dissatisfaction is common among hospital nurses (Aiken, Clarke, & Sloane, 2002).

- Demand for PHNs, particularly experienced PHNs, outstrips supply, and PHN managers uniformly report difficulties in recruiting for open positions. Nursing shortages may affect PHN more seriously in the future.

Organization

- PHNs tend to work with a wide variety of other health service providers. A majority of PHNs were aware of tensions between PHNs and other classes of workers based on overlapping duties or role definitions.

Practice Roles

- While public health nursing is defined as a population-focused practice, PHN practice activities and PHN manager priorities prioritize individual-family level interventions more than community or system level interventions. Case management on the individual level is the most frequently performed and highly prioritized intervention for those surveyed.

Client Demographics

- The most frequent PHN client is a Hispanic female under the age of 18 who is served by Medi-Cal and is in good health.

Recommendations

- Ensure that strategies to address the overall shortage of registered nurses includes a focus on the unique role of PHNs and the need to increase the supply of PHNs. Because California regulations require that PHNs have baccalaureate nursing degrees, the training of more PHNs is a key responsibility of baccalaureate nursing programs in the state.

- Reform PHN educational curricula to incorporate a greater population health focus. Most PHNs are educated in general nursing training programs that emphasize preparation for clinical practice and have minimal curricular requirements in community and public health. Even nurses with baccalaureate degrees are unlikely to have received substantial training in epidemiology, organizational theory, public policy, and related subjects that are integral to public health practice. Equipping PHNs with the skills needed for a public health model of practice may require consideration of educational reforms such as joint RN and MPH degree programs and more intensive and sustained continuing education models.

- Critically appraise the organizational and financial constraints of local public health departments that result in prioritizing PHN activities in direct, individual level care rather than population health. Health departments should engage in a formal planning process to evaluate the roles of PHNs in their departments, and to evaluate strategies for enhancing the full value of PHNs as a public health resource.

Chapter I

Introduction

Changes in the health care arena have led to the reorganization of many local health departments as well as changes to public health practice. Public health nurses (PHNs) are the largest group of public health workers and comprise nearly 11% of the public health workforce nationally (Gebbie, 2000). However, data about PHN demographics and practice are limited.

As defined by the American Public Health Association, "public health nursing is the practice of promoting and protecting the health of populations using knowledge from nursing, social, and public health sciences…. The focus of public health nursing is not on providing direct care to individuals in community settings" (American Public Health Association [APHA], 1996). Contemporary public health nursing theory has attempted to clarify the notion of the community as client and the meaning of a population-focused practice (APHA, 1996; Baldwin, Conger, Abbeglen, & Hill, 1998; Kuehnert, 1995; Kuss et all, 1997; McKnight & Van Dover, 1994). Models have been proposed to differentiate between public health nursing (PHN) interventions at the individual, community and population levels (Keller et al., 1998; Kuehnert, 1995; Kuss et al., 1997).

Whether public health nursing in practice accords with this population-focused conceptualization of the profession is not clear. There is little systematically collected information about what constitutes the actual scope of PHN practice. Nurse educators and employers have voiced concerns that public health nurses are not well prepared in population health science and policy (Bramadat, Chalmers, & Andrusyszyn, 1996; Gebbie & Hwang, 2000; Nickel et al., 1995). Although recommended standards for PHN education are a baccalaureate degree for generalists and a master's degree for specialists (Association of Community Health Nursing Educators [ACHNE], 2000a; ACHNE, 2000b; APHA, 1996), only 50% of public and community health nurses hold a baccalaureate degree or higher (Bureau of Health Professions, Division of Nursing, 2002). Moreover, even for public health nurses well educated for population health practice, the insistent demands of the health care system for personal, clinically-oriented services may limit opportunities to practice in a public health model.

The purpose of this study was to gather information about the PHN workforce and systematically evaluate the scope of PHN practice. We conducted a survey of PHNs in California to investigate the following areas:

- the demographics of the PHN workforce;
- the educational preparation of the PHN workforce;
- the job market and employment issues for the PHN workforce; and
- the scope of PHN practice.

Chapter II

Methods

In the winter of 1999-2000, we mailed surveys to all of the PHNs in five California counties (Alameda, Mendocino, San Bernardino, San Francisco, and Santa Clara). To be included, the counties needed to have at least 20 PHN employees, a variety of public health programs involving PHNs, and a contact person in the county willing to assist in identifying the public health nursing staff in the county. The counties selected span urban, suburban, and rural areas of the state.

Public health nursing directors or supervisors from each county provided names and contact information for all PHNs in the public health department and designated each as staff or managers. Survey packets were mailed directly to 412 PHNs in the five counties. Those who did not return completed surveys were mailed additional materials or were contacted by telephone and encouraged to complete the survey.

After the original mailing and follow-up, 29 nurses (22 staff, 7 manager-director) were determined to be ineligible for the study due to death, retirement, leave of absence, or inability to be located. Of the 383 eligible PHNs, 289 returned completed surveys (254 staff, 35 manager-director) for a response rate of 75% (76% staff, 69% manager-director).

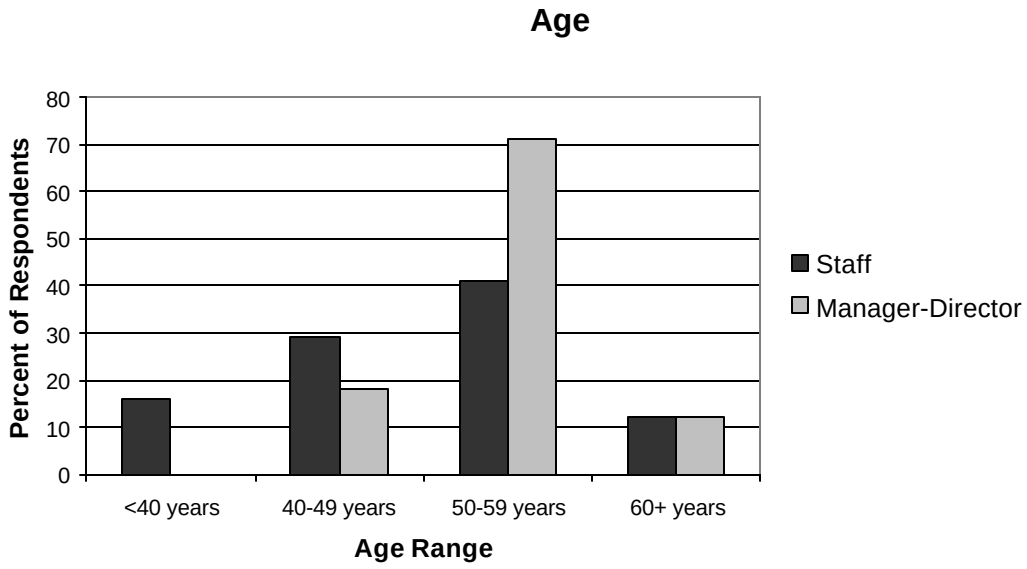
COUNTY	n_{mailed}	$n_{excluded}$	$n_{mailed-excluded}$	$n_{returned}$	**Response rate**
Alameda	91	8	83	58	70%
Mendocino	21	1	20	20	100%
San Bernardino	99	7	92	66	72%
San Francisco	86	7	79	61	76%
Santa Clara	115	6	109	84	77%
TOTAL	412	29	383	289	75%

The largest group of respondents is from Santa Clara County (29%). San Francisco, San Bernardino, and Alameda counties each represent approximately 20% of respondents, and 7% of the respondents are from Mendocino County.

Chapter III

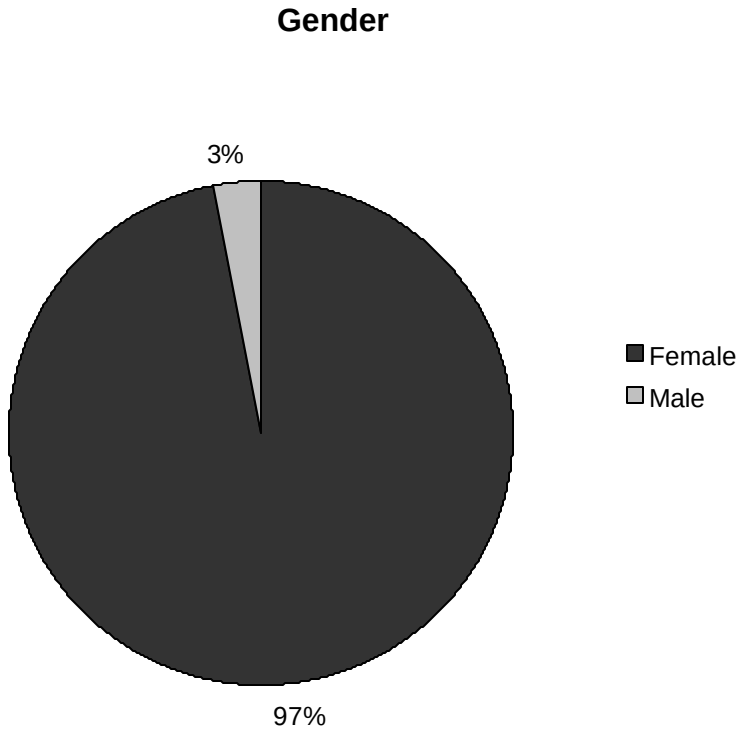
Demographics

AGE:
More than half of staff and 80% of managers are 50 years of age or older. 19% of staff PHNs are under the age of 40, while no managers or directors are under the age of 40. The mean age of all respondents is 49.4 years (staff=48.8, manager/director 53.4), higher than the mean age of 45 for all nurses in California [1]. Many nurses are nearing retirement age, fewer people are entering the nursing profession, and those that enter nursing often do so at a later age.



[1] CA Survey of Registered Nurses

GENDER:
Like the nursing profession in general, most PHNs are female. 97% of PHNs are female, slightly more than the general California RN population (92.6% of RN's in CA in 1997 were female).



RACE/ETHNICITY:
Racial and ethnic groups employed in PHN do not match the composition of California's population. Represented in the overall sample at rates above those of the general population are whites (58% vs. 44%) and African Americans (12% vs. 8%). American Indians/Alaska Natives and Asian/Pacific Islanders are represented in PHN at approximately the same level as California's population (see table below). Hispanics and Latinos are significantly underrepresented in the PHN workforce, constituting 26% of the population in study counties but only 10% of the PHN respondents. PHNs surveyed are more diverse than California nurses in general, with greater representation of African-Americans and Latinos among PHNs.

	PHNs in study counties (2000)	California RNs (1997)[2]	Study county population (2000) [3]
African-American	12%	5%	8%
American Indian/Alaska Native	2%	<1%	<1%
Asian/Pacific Islander	15%	23%	19%
Hispanic/Latino	10%	5%	26%
White (non-Hispanic)	58%	65%	44%
Other	2%	2%	3%[2]

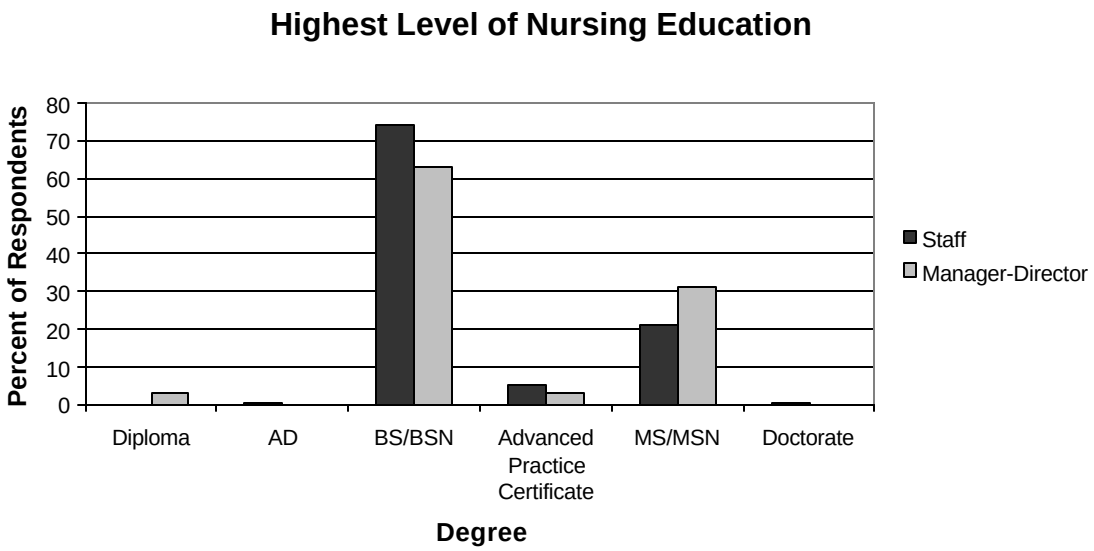
[2] CA Survey of Registered Nurses

[3]Population and Percent Distribution by Race and Hispanic Origin: California, Census 2000. http://www.dof.ca.gov/html/fs_data/stat-abs/tables/b5.xols accessed July 18, 2002. Information for Alameda, Mendocino, San Bernardino, San Francisco, and Santa Clara counties combines.
Combined categories "Other Alone" and "Multirace"

EDUCATION

HIGHEST LEVEL OF NURSING EDUCATION:

Licensure as a PHN in California requires completion of an approved BSN program or documentation of specific public health related coursework, and most PHNs who responded to the survey are educated at the baccalaureate level or above in nursing. 72% of PHNs have a BSN as their highest degree, and 22% have an MSN as their highest degree. In contrast, for California RNs as a whole, approximately 55% are educated at the diploma or associate levels, 38% at the baccalaureate level, and 7% at the master's degree level[4]

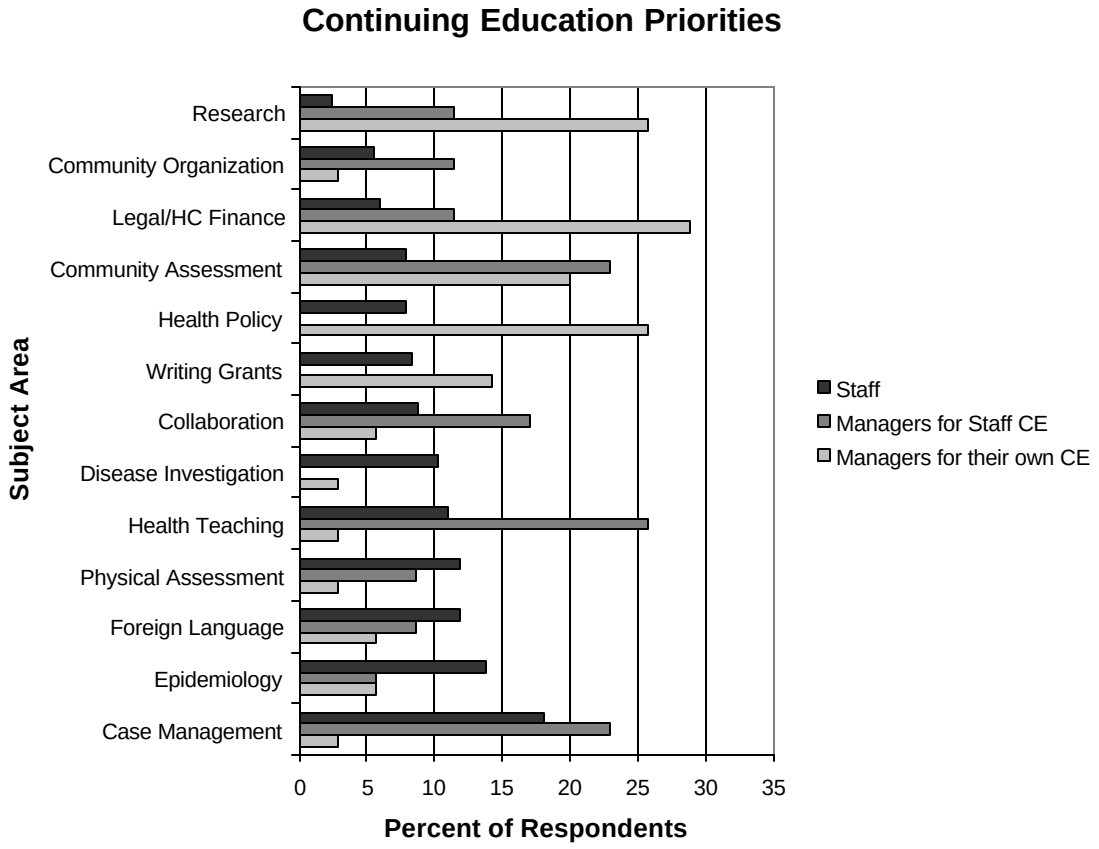


[4] CA Survey of Registered Nurses

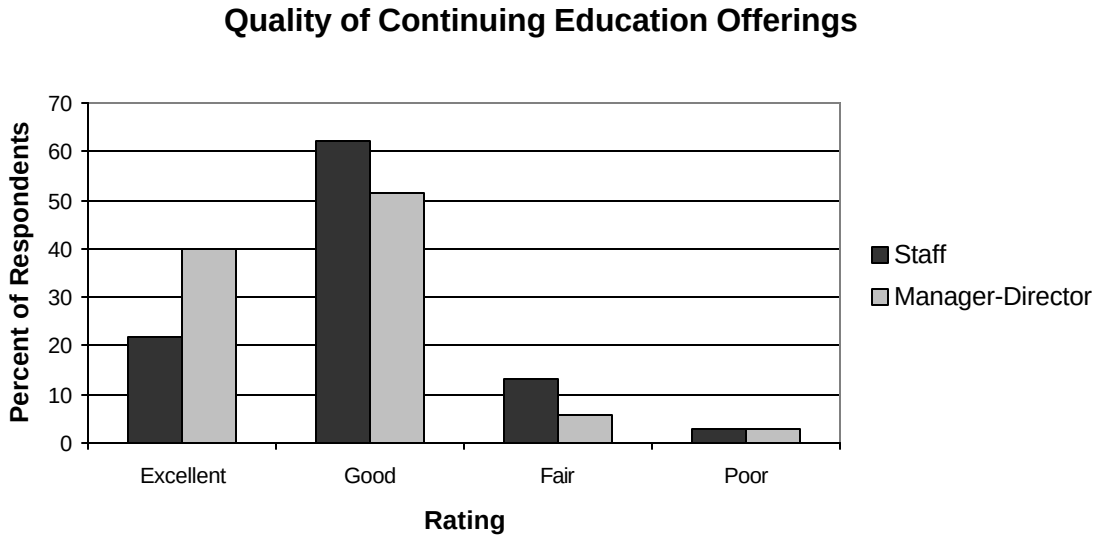
CONTINUING EDUCATION:
Public health departments often require continuing education [CE] above and beyond that necessary to maintain licensure as an RN. Additional CE requirements range from 10 to 40 hours per year, and are generally focused on specific subject areas relating to public health such as communicable diseases, maternal/child health, disaster preparedness, or lead contamination. All departments surveyed provide support for CE, including time off from work; in-service education programs; identifying training opportunities; and money for registration, travel, or lodging.

Staff priorities for continuing education differ somewhat from manager priorities for staff CE. Staff were most interested in CE about case management, epidemiology, foreign languages, physical assessment, and health teaching. Managers wanted their staff to take CE in health teaching, community assessment, case management, collaborating with other health care providers or agencies, community organization, legal and health care finance, and research.

Managers identified their personal CE priorities differently from what they deemed important for their staff . Administrative and policy concerns such as legal and health care finance issues, health policy, research, community assessment, and grant writing were the CE topics in which managers were most interested.



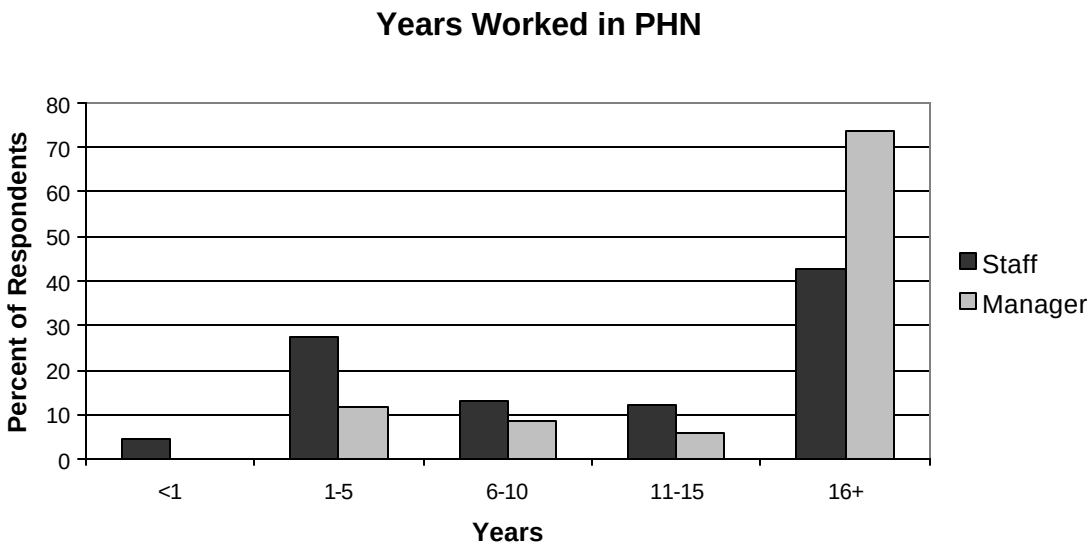
The majority of PHNs rate CE offerings as good or excellent (staff 84%, manager-director 91%). Managers and directors are more likely than staff to rate CE offerings as excellent (manager-director 40%, staff 22%).



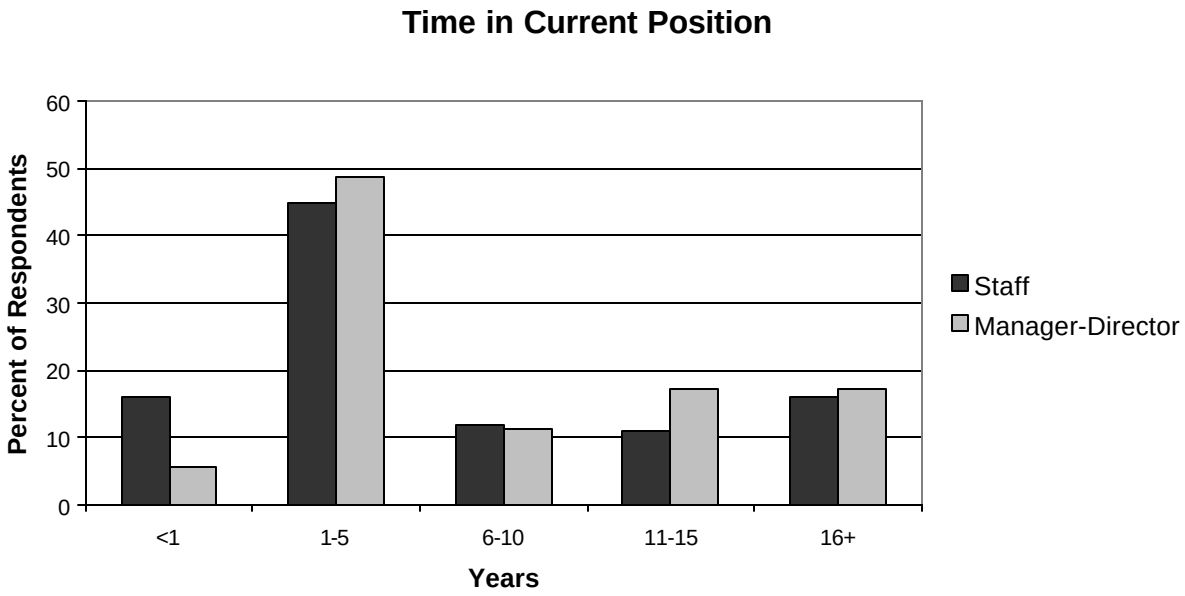
JOB MARKET

TIME IN PHN:

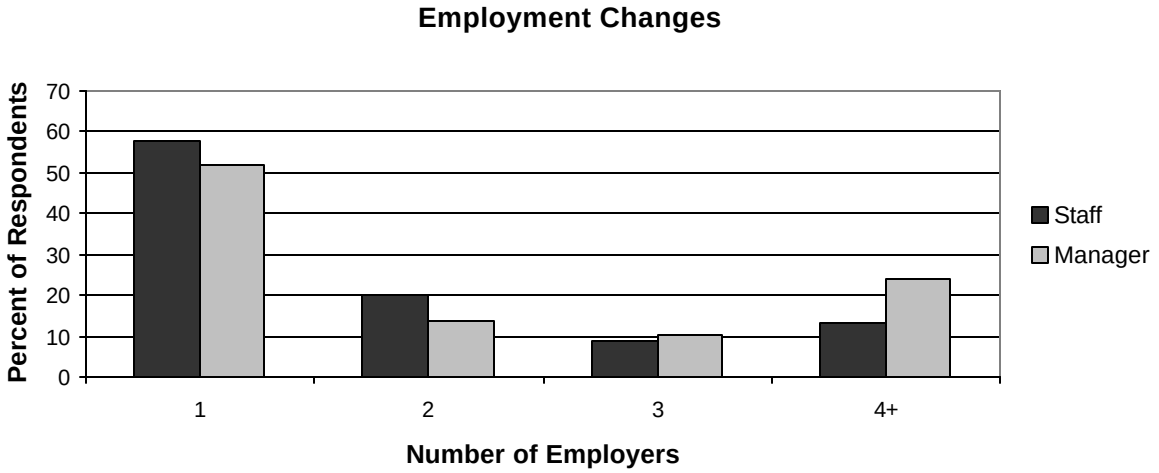
Most PHNs have been employed in the profession for more than 15 years. Over 40% of staff and 70% of managers and directors have been employed as a PHN for 16 or more years. Approximately 30% of staff have been in the profession for 5 years or less.



TIME IN CURRENT POSITION:
Most PHNs have held their current position for five years or fewer. More than 30% of staff and managers have been in their current position for over 10 years.

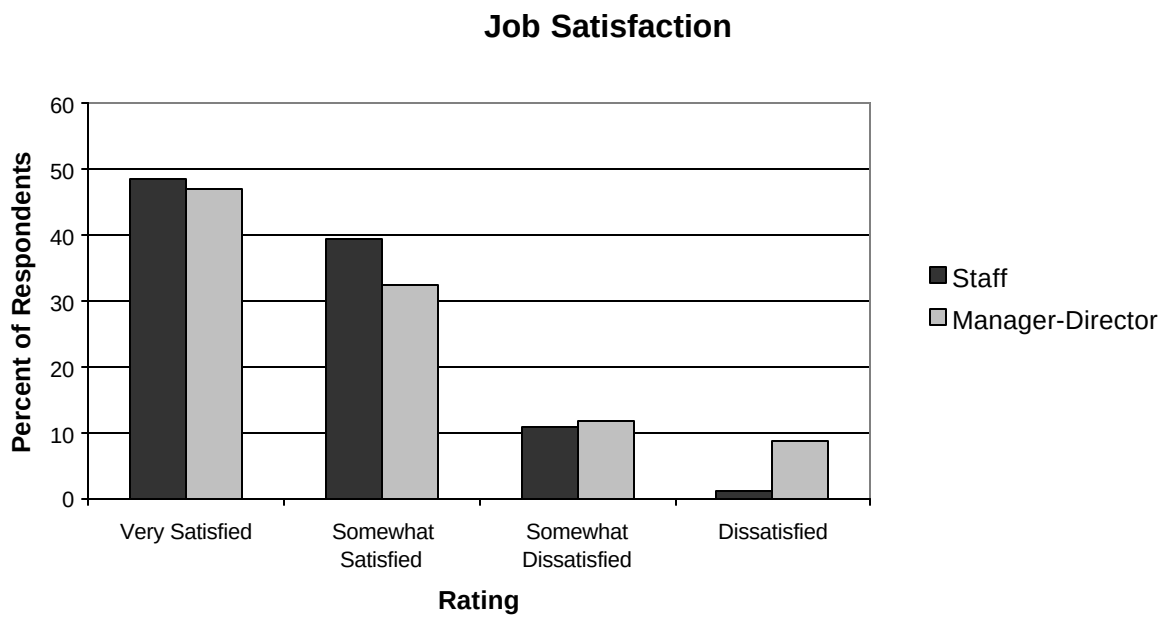


NUMBER OF EMPLOYERS:
The majority of PHNs reported having only one employer during their career. As most PHNs have been in the profession for over 15 years, it may be that PHNs hold a number of different positions within a single public health department over the course of their careers. About one quarter of PHN managers had been employed by four or more different employers, compared with fewer than 15% of staff PHNs.

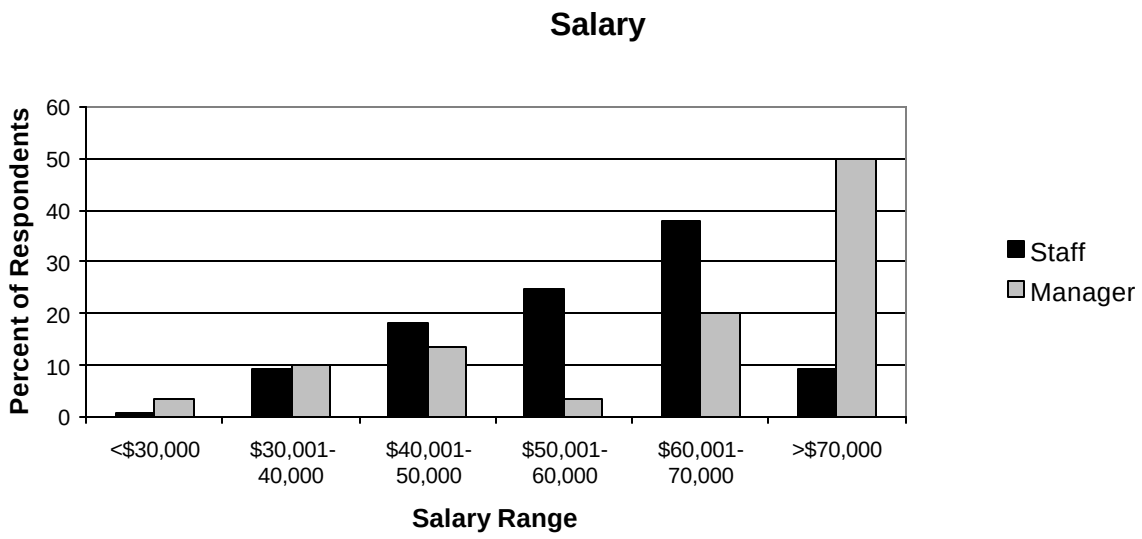


JOB SATISFACTION:

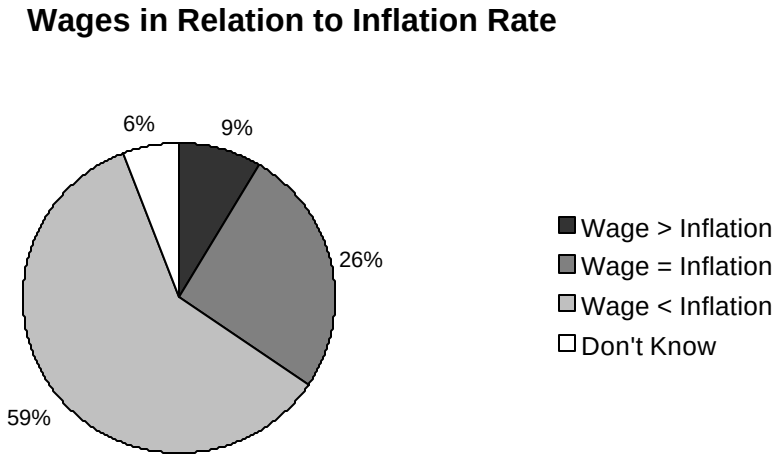
The majority of PHNs express satisfaction with their jobs. Almost 90% of PHNs indicate that they are very or somewhat satisfied with their work.. This may also be reflected in the percentage of PHNs working in the field for over 15 years and the percentage of PHNs with only one employer during their career. Managers and directors expressed more dissatisfaction with their work than staff did – over 20% of managers and directors as compared to slightly over 10% of staff. Additionally, virtually no staff indicated that they were very dissatisfied with their jobs, while nearly 10% of managers and directors expressed this level of dissatisfaction.



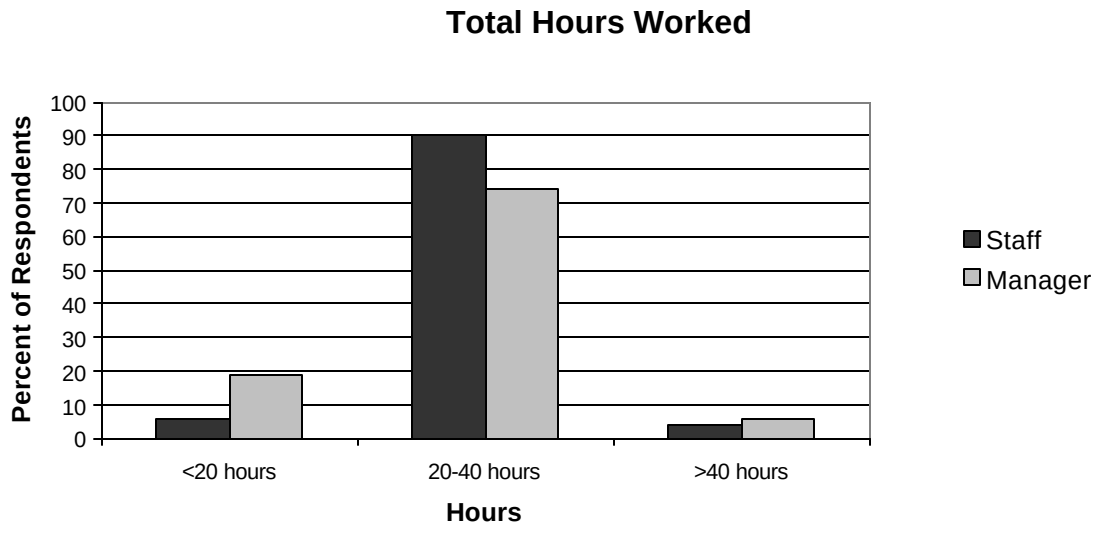
ANNUAL SALARY:
PHN salaries range from less than $30,000 to more than $70,000. The majority of staff PHNs (62%) report incomes in the $50,000 to $70,000 range. Half of PHN managers report salaries over $70,000. (The data shown are not adjusted for differences in work hours or for cost of living differences between counties). In optional comments for the survey, several PHNs indicated that they feel they are underpaid relative to the importance and risks of their work.



WAGE SCALES:
In general, PHN wages do not appear to be keeping pace with changes in the cost of living. 59% of PHN managers and directors report that PHN wage scales have not kept pace with inflation. However, 26% indicate that wage scales have increased to keep pace with inflation and another 9% report that wages have increased more than the rate of inflation.



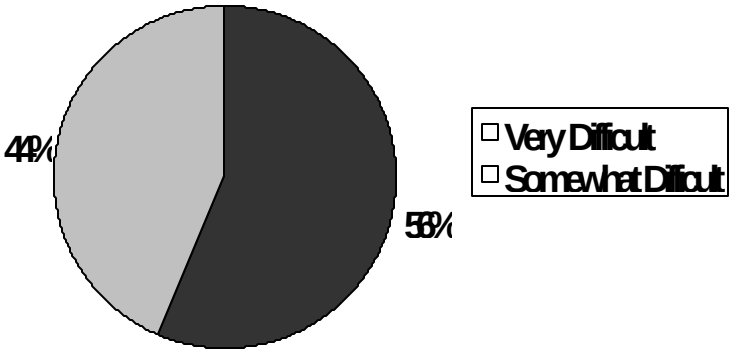
HOURS WORKED:
The majority of PHNs work 40 hours per week and PHN is their primary or only paid work. The mean amount of time staff work in PHN is 37 hours per week, and the median is 40 hours with a range of 2 to 80 hours. Managers also work a median of 40 hours per week (mean=28.3 hours). Almost 20% of managers worked less than 20 hours per week in PHN.



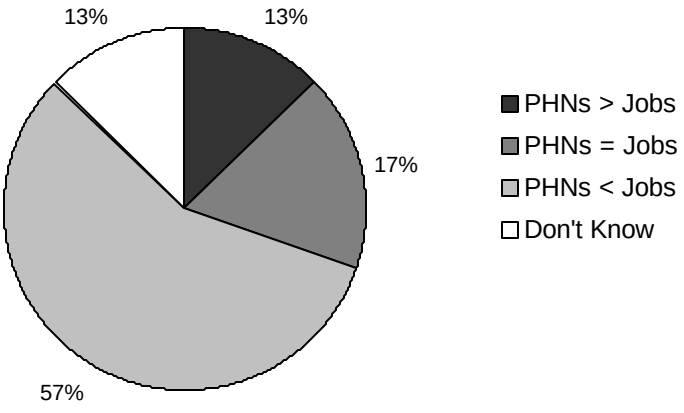
SUPPLY AND DEMAND:

Demand for PHNs outstrips supply. All managers report difficulty recruiting experienced PHNs, with over half indicating they are very difficult to recruit. 57% of managers indicate that there are fewer newly prepared PHNs than jobs available for them, and 82% report that there are fewer experienced PHNs than jobs available for them.

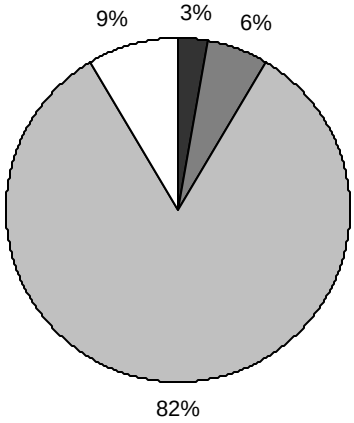
Recruiting Experienced PHNs



Supply of Newly Certified PHNs



Supply of Experienced PHNs

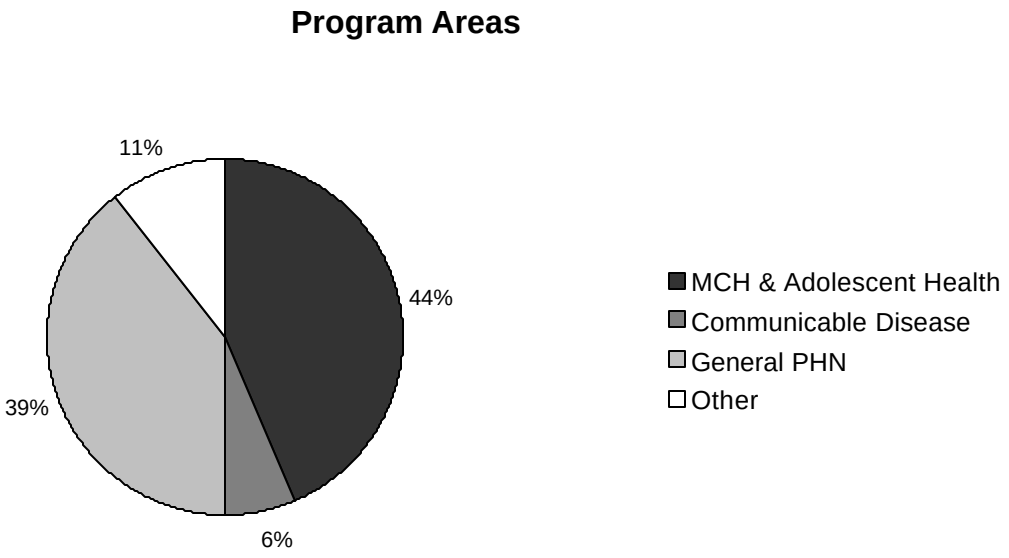


ORGANIZATION

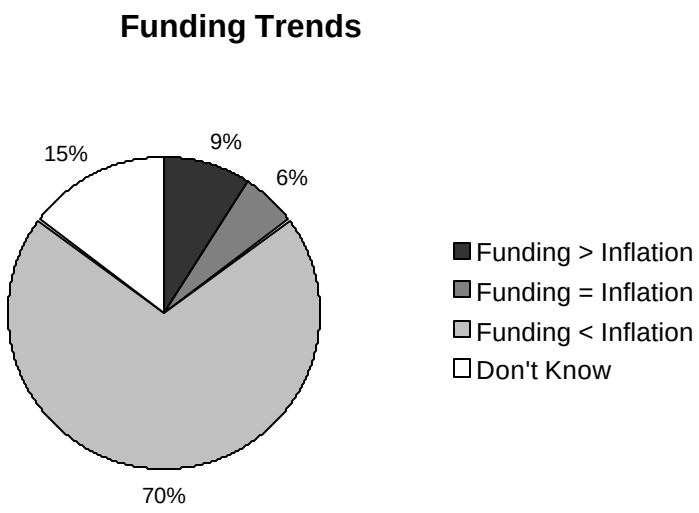
HEALTH DEPARTMENT ORGANIZATION:

Four of the five health departments had a designated public health nursing division or unit.

Public health nurses worked on a variety of programs within the public health departments. The two most common categories were maternal/child and adolescent health (44%) and general public health nursing (39%). Communicable disease control and epidemiology are critical components of public health services, but are less well represented by actual PHN jobs, with only 6% of PHNs working specifically in these areas.

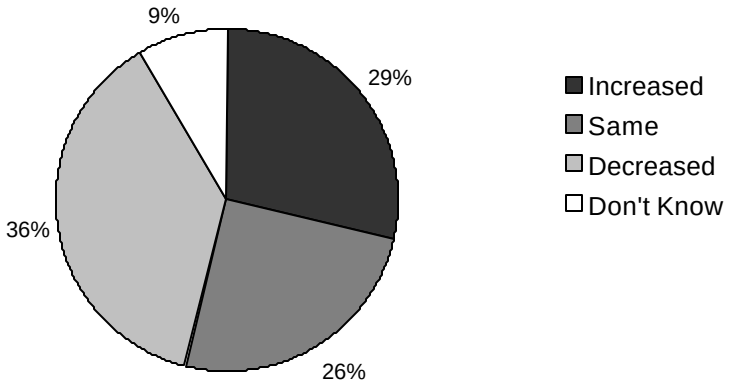


FUNDING:
Funding for PHN-managed programs has not kept pace with inflation according to 70% of PHN managers and directors. Funding for these programs comes from a variety of sources from the county, state, federal, and private sectors. Counties and Medi-Cal were cited as the most common sources of funding.

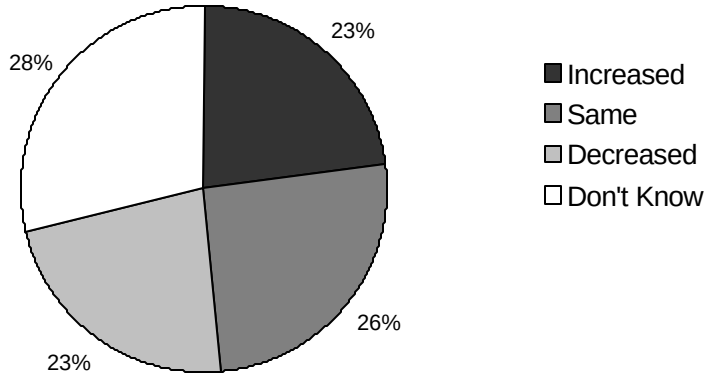


NET CHANGE IN PHN POSITIONS:
PHN managers differ in their views on recent changes in the proportion of PHNs to other workers in their programs. 36% of managers indicate that the proportion of PHNs had decreased, while 29% say it increased and 26% say it remained the same. Projecting the proportion of PHNs in the future results in a fairly even split between an increase (23%), remaining the same (26%), and a decrease (23%), with the remainder unsure as to how it might change.

PHN Manager Views on Trends in Ratio of PHNs to Other Staff



PHN Manager Estimates of Future Ratio of PHNs to Other Staff

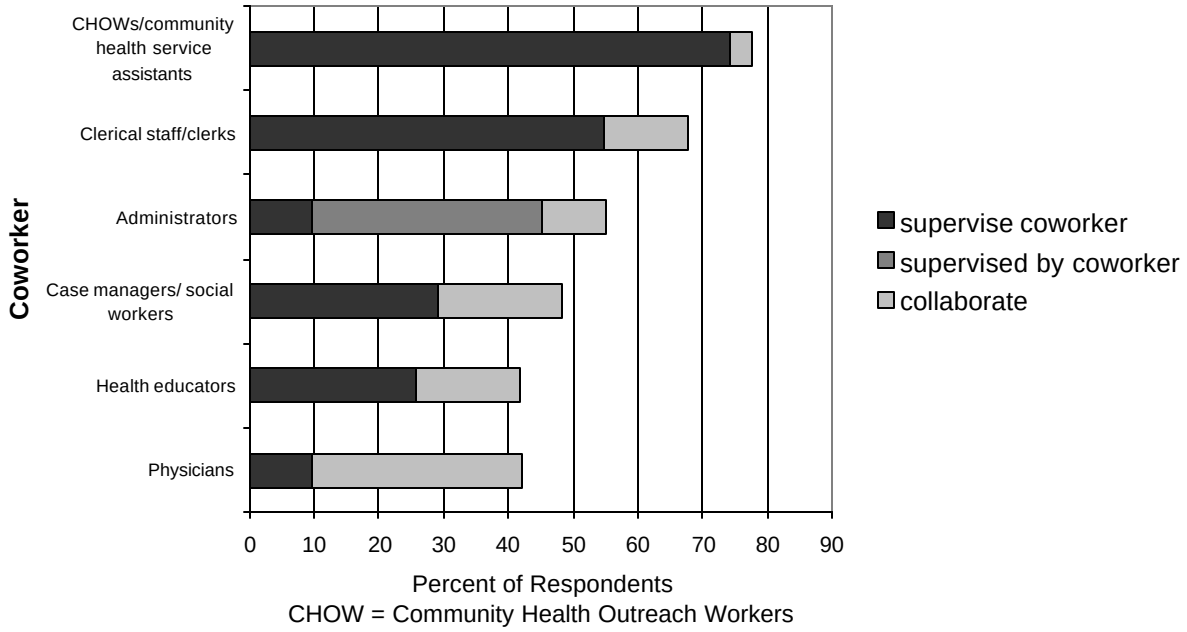


RELATIONS WITH OTHER EMPLOYEES:
PHNs work with a variety of other health care and service providers. Staff PHNs most commonly work with case managers and social workers, community health outreach workers, physicians, clerical staff, other RNs, and medical assistants; and their relationships are most often collaborative rather than supervisory. PHN managers and directors most commonly work with community health outreach workers, clerical staff, administrators, case managers and social workers, health educators, and physicians; and these relationships are more often supervisory than collaborative.

PHN Staff Coworkers and Supervisory Relationships

CHOW = Community Health Outreach Workers

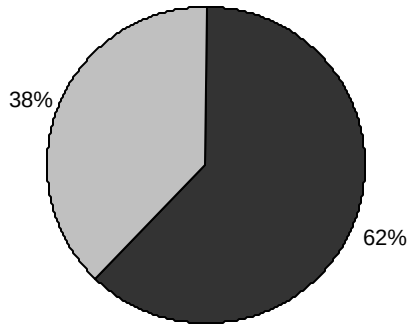
PHN Manager Coworkers and Supervisory Relationships



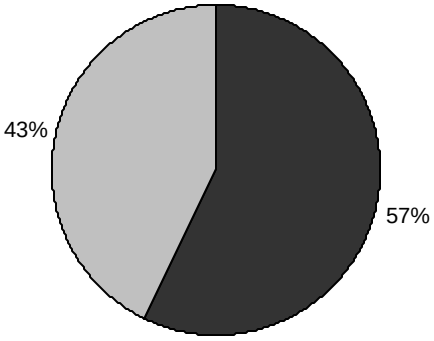
CHOW = Community Health Outreach Workers

Some PHNs are concerned about being replaced by other types of care providers. The majority of PHN staff and managers are aware of tensions between PHNs and other groups of public health workers based on overlapping duties or role definitions. Staff and managers most often express an awareness of PHN staff tensions with community health outreach workers, communicable disease investigators, and medical assistants.

Staff perception of tension between PHN staff and other public health employees

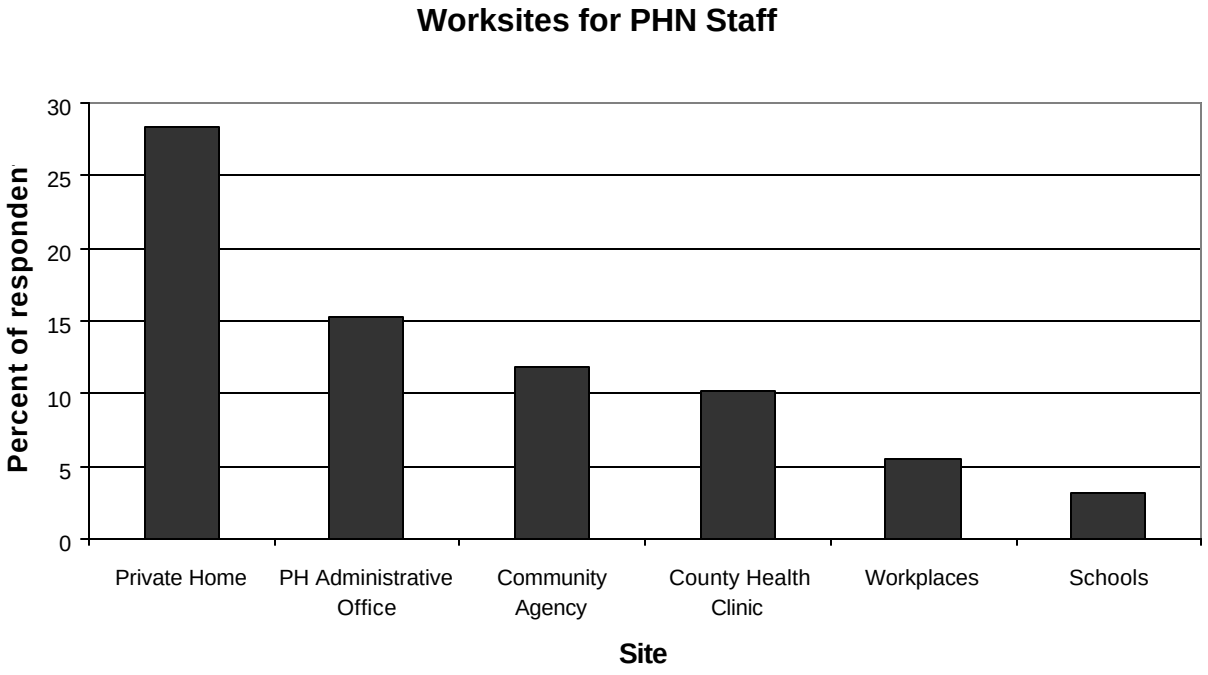


Managers perception of tension between PHNs and other public health employees



SITE OF PRACTICE:

PHNs work in a variety of settings, but the majority of their work is done in private homes, public health department administrative offices, county health clinics, community agencies, workplaces, and schools. Over 25% of staff indicate that private homes are one of their two most common worksites, followed by 15% reporting public health department offices, and more than 10% reporting community agencies.

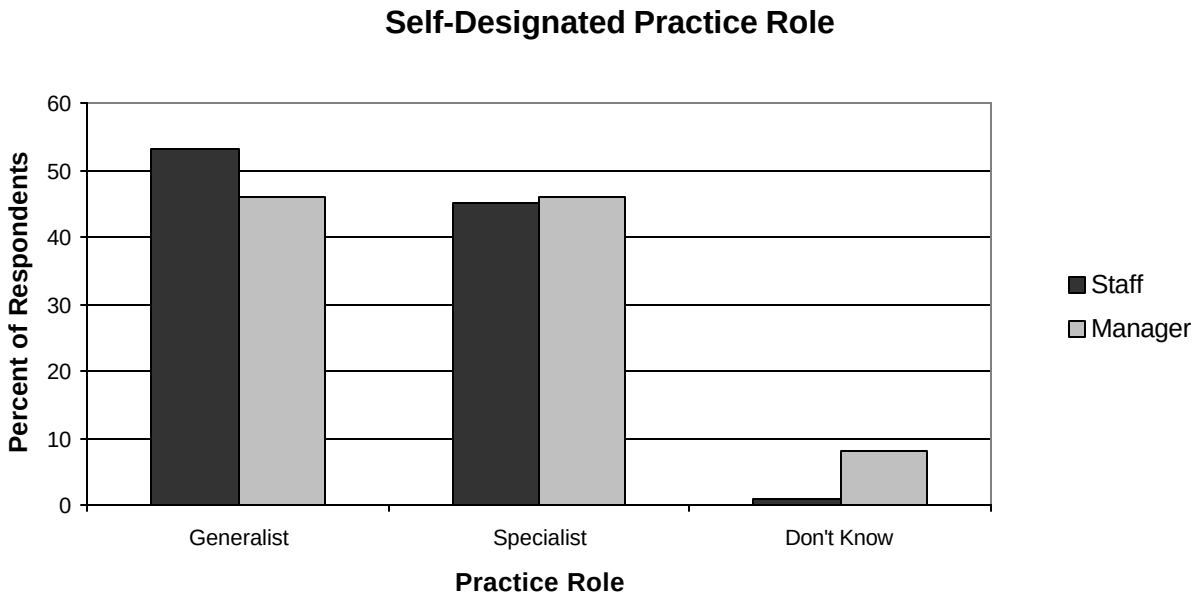


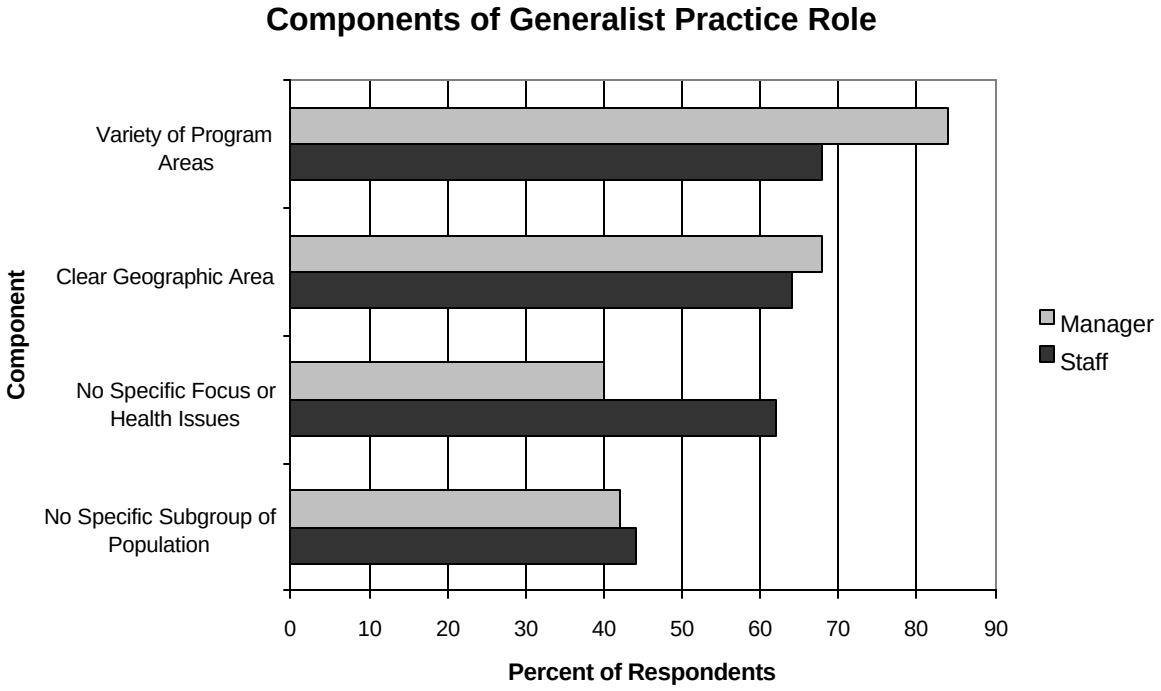
Note: Data show the percent of PHNs reporting each site as among their two most common work settings.

PRACTICE ROLES

SPECIALIST AND GENERALIST PRACTICE:

53% of staff PHNs and 44% of PHN managers are classified as generalists by their employers. Similar numbers classify themselves in the same way. The majority of PHNs report working in a variety of program areas (68% staff, 84% manager) and in a clear geographic area (64% staff, 68% manager), both of which are associated with generalist practice. Only 38% of staff but 60% of managers report work with a specific focus or particular health issues, which is associated with specialist PHN practice. The majority of PHNs also report working with specific subgroups of the population (56% staff, 58% manager), which is also associated with specialist practice.




Components of Generalist Practice Role
Variety of Program Areas
Clear Geographic Area
No Specific Focus or Health Issues
No Specific Subgroup of Population
Component
0
10
20
30
40
50
60
70
80
90
Percent of Respondents
Manager
Staff

LEVELS OF PRACTICE INTERVENTIONS:

Public health nursing practice is directed at a number of levels and is meant to be a population-focused practice. The questionnaire we developed included a series of items on scope of practice that addressed the types of interventions performed by PHNs and the adequacy of educational preparation for these interventions. These items were based on a model developed by Keller et al. (1998) to identify three levels of PHN intervention – individual-family, community, and system – and the specific types of interventions PHNs perform at each of these levels. Using this conceptual model, we selected several of the most common and important interventions at each level for inclusion in the questionnaire. We adapted the descriptions and examples of the interventions provided by Keller et al. to create items suitable for a self-administered questionnaire (see Appendix for questionnaire items).

The questionnaire specified six interventions at the individual-family level, seven at the community level, and six at the system level. Using a four point Likert scale, staff nurses were asked to rate how often they performed each intervention (1=never, 2=occasionally, 3=frequently, 4=extensively) and to rate their educational preparation for each intervention (1=poor, 2=fair, 3=good, 4=excellent). Managers and directors were asked to rate the importance of each type of intervention for public health nursing practice (1=somewhat important, 2=important, 3=very important, 4=more important than almost anything else) and to rate the educational preparation of their PHN staff for these interventions (1=poor, 2=fair, 3=good, 4=excellent).

Responses to the Likert scales were collapsed to compare the two highest response categories with the two lowest categories. In addition, scales were created for the three levels of intervention (individual-family, community, system) for each of the four rating areas (frequency of performance, importance, educational preparation rated by staff, and educational preparation rated by managers). A score for each scale (e.g., the scale for frequency of activity at the individual-family level) was computed by calculating the mean rating of the individual items comprising this scale.

On the whole, practice interventions focused at the individual-family level are performed most often, valued as most important, and are the arenas in which PHNs are deemed best educated. Staff report performing individual-family level interventions most often, followed by community and then system level interventions. The most commonly performed intervention is case management, with 91% of staff performing this intervention extensively or frequently. All individual-level interventions are performed frequently or extensively by a larger percentage of respondents (40-91%) than any of the community (9-29%) or system level interventions (5-14%).

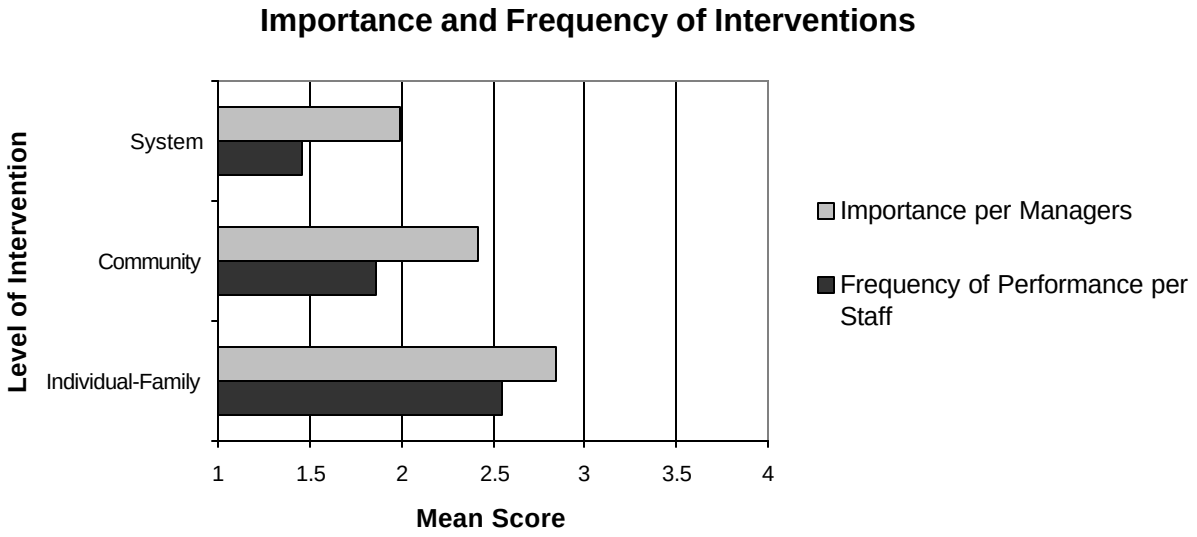
The pattern of responses of managers and directors about the value of interventions at the different levels is similar to that of staff PHNs about their actual practice activities. Managers and directors rate individual-family level interventions as the highest priority, with only one intervention (delegated medical treatments/observations) not rated as at least very important by the majority of respondents. Case management at the individual level is the single most highly valued intervention (94%). More PHN managers also rate interventions at the individual-family level as at least very important (48-94%) than those interventions at the community (26-76%) and system level (12-44%). It is noteworthy that a majority of managers and directors consider four of the seven community level interventions to be at least very important (community

organizing, counseling/advocacy, disease investigation, and health teaching), whereas very few staff PHNs report frequently perfo rming these community level interventions.

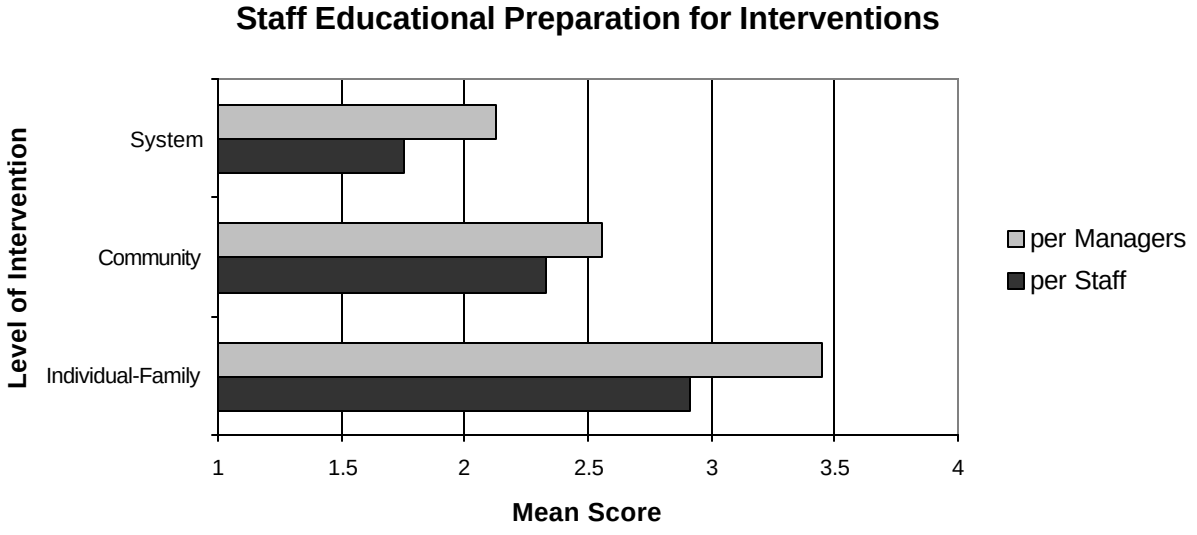
Interventions at Individual-Family, Community, and System Levels

Level of Intervention	Type of intervention	Performed by Staff "frequently" or "extensively", %	"Very important" or "more important than almost anything else" per Managers-Directors, %	Staff perception of "excellent" or "good" educational preparedness, %	Manager-Director perception of "excellent" or "good" staff educational preparedness, %
INDIVIDUAL - FAMILY	Case management	91	94	71	91
	Counseling/advocacy	58	88	70	94
	Delegated medical treatments/observations	41	48	86	82
	Disease investigation	40	76	72	88
	Outreach/case finding	58	65	72	88
	Screening	62	56	78	94
COMMUNITY	Community organizing	15	53	32	55
	Counseling/advocacy	17	53	37	42
	Disease investigation	16	76	49	67
	Health teaching	29	65	57	61
	Policy development	9	47	20	30
	Screening	15	26	52	70
	Surveillance	15	32	33	39
SYSTEM	Coalition building	11	21	20	30
	Counseling/advocacy	7	26	23	36
	Outreach/case finding	14	44	26	45
	Policy development	13	35	20	28
	Social marketing	6	12	13	33
	Surveillance	5	29	19	30

Summary scores for the intervention levels demonstrated a significant gradient in both frequency of PHN activity and manager-director rating of intervention importance. For PHN activities, individual-family level interventions received the highest score (mean 2.55), followed by community level interventions (mean 1.86), with system level interventions receiving the lowest score (mean 1.46). Similarly, for PHN managers and directors, mean scores for importance of interventions were 2.91 for individual-family level, 2.42 for community level, and 1.99 for system level.



The same general patterns were observed in staff and manager-director ratings of PHN educational preparedness for interventions at different levels. Educational preparedness was rated most highly for individual-family level interventions, followed by community and system level interventions. A majority of PHN staff rated their preparation as excellent or good for only one of the interventions at the community and system levels.

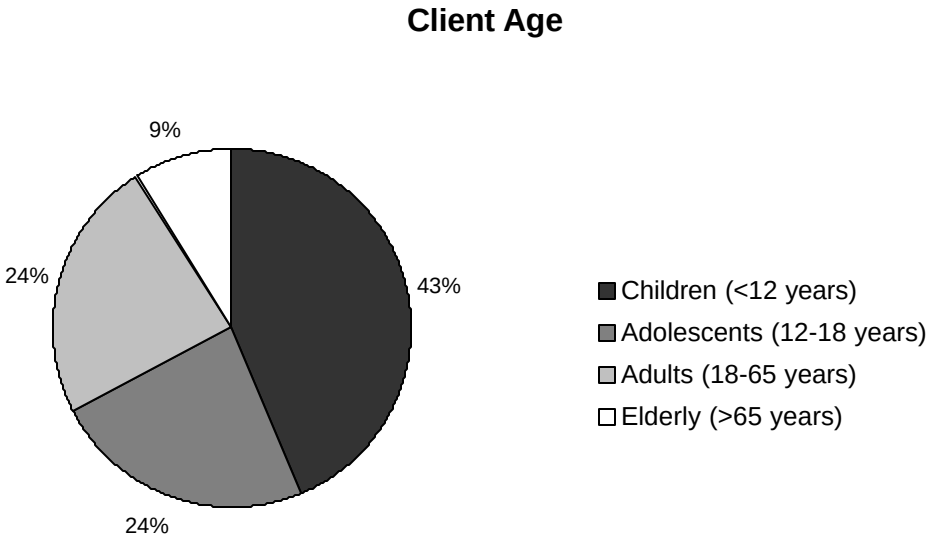


CLIENT DEMOGRAPHICS

PHNs were asked to estimate the population they served in terms of age, race/ethnicity, gender, insurance status, health status, fluency in English, and socioeconomic status. Individual PHNs work with a variety of clients, often depending on the PHN's type of program. Mean percentages were calculated for each demographic category. The most frequent PHN client is a Hispanic female under the age of 18 who is served by Medi-Cal and is in good health.

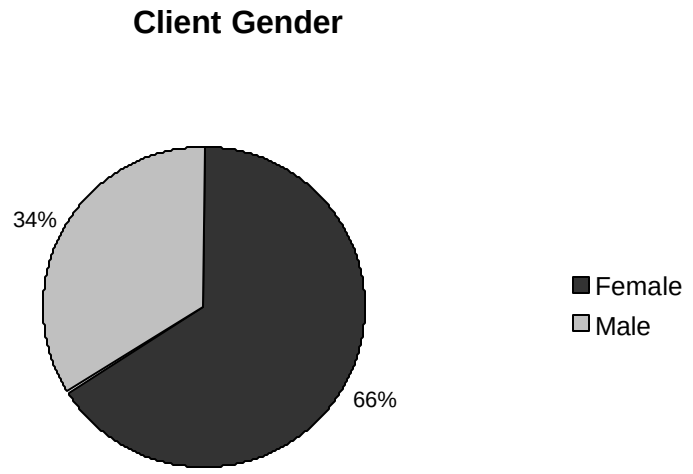
AGE:
The overwhelming majority of clients served by PHNs are children. An average 43% of clients are under the age of twelve, and another 24% are between twelve and eighteen years of age. 9% of those served are elderly, similar to the elderly population (~10%) in the study counties.

Ages[5]:	PHN clients	Study county population (2000)[6]
0-18	67%	30%
18-65	24%	60%
65+	9%	10%



[5] Study county population projections are for the following age groups: 0-19, 20-64, 65+
[6] State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 1970-2040, http://www.dof.ca.gov/HTML/DEMOGRAP/projco.pdf, accessed August2, 2002. Information for Alameda, Mendocino, San Bernardino, San Francisco, and Santa Clara counties combined.

GENDER:
PHNs serve more female than male clients.



RACE/ETHNICITY:
The single largest racial or ethnic group served by PHNs is the Hispanic/Latino population. Approximately 40% of PHN clients are Hispanic/Latino, a proportion larger than their representation in the population in the study counties. African-Americans are also disproportionately represented as clients receiving public health services, constituting 22% of PHN clients but only 8% of the population in the study counties. Whites are underrepresented (22% vs. 44%), while American Indians/Alaska Natives, Asian/Pacific Islanders, and other races make up approximately equal parts of the general population and PHN clients.

	PHN clients	Study county population (2000)[7]
African-American	22%	8%
American Indian/Alaska Native	1%	<1%
Asian/Pacific Islander	13%	19%
Hispanic/Latino	40%	26%
White (non-Hispanic)	22%	44%
Other	2%	3% [8]

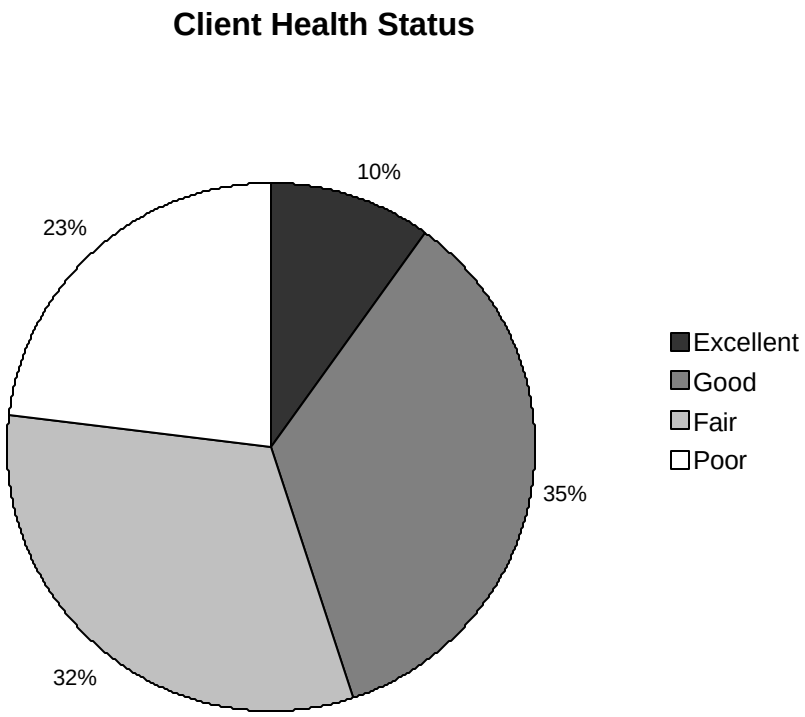
[7] Population and Percent Distribution by Race and Hispanic Origin: California, Census 2000. http://www.dof.ca.gov/html/fs_data/stat-abs/tables/b5.xls accessed July 18, 2002. Information for Alameda, Mendocino, San Bernardino, San Francisco, and Santa Clara counties combined.
[8] Combined Categories "Other Alone" and "Multi Race"

INSURANCE STATUS:
Over 60% of PHN clients are insured through Medi-Cal. Slightly fewer than 20% are uninsured. Fewer than 10% of PHN clients have private health insurance coverage. While the majority of PHN clients are children, only 3% of clients are covered by California's Healthy Families program.

	PHN clients	California[9]
Uninsured	18%	19%
Medicare	8%	9%
Private Insurance	8%	59%[10]
Healthy Families	3%	N/A
Medi-Cal	61%	13%[11]
Other	2%	N/A

[9] accessed at http://www.statehealthfacts.kff.org/cgi-bin/healthfacts.cgi?action=profile&category=Health+Coverage+%26+Uninsured&subcategory=&topic=&link_category=&link_subcategory=&link_topic=&welcome=&area=California&notes=show&printerfriendly=0#pagetopic1, August 2, 2002.
[10] Categories "Employer" and "Individual"
[11] Category "Medicaid"

HEALTH STATUS:
PHNs generally rated their clients' health status as good (35%) or fair (32%). 10% of clients were deemed to be in excellent health, while 23% were rated as having poor health.



OTHER:
Almost 40% of PHN clients were not fluent in English.

Conclusions

- Many PHNs are nearing retirement age.

- Almost all PHNs are educated at the baccalaureate level or above in nursing.

- The majority of PHNs have been in the profession for more than 15 years and express satisfaction with their jobs.

- Demand for PHNs exceeds the supply of new and experienced PHNs in the job market.

- PHNs work with a wide variety of other health service providers, and some experience tensions with these workers based on overlapping duties or role definitions.

- PHN practice activities and PHN manager priorities focus on individual-family level interventions over community or system level interventions. Case management on the individual level is the most frequently performed and highly prioritized intervention for those surveyed.

- PHNs generally serve a young, female, non-white clientele who receive Medi-Cal coverage or are uninsured.

Recommendations

- Ensure that strategies to address the overall shortage of registered nurses includes a focus on the unique role of PHNs and the need to increase the supply of PHNs. Because California regulations require that PHNs have baccalaureate nursing degrees, the training of more PHNs is a key responsibility of baccalaureate nursing programs in the state.

- Reform PHN educational curricula to incorporate a greater population health focus. Most PHNs are educated in general nursing training programs that emphasize preparation for clinical practice and have minimal curricular requirements in community and public health. Even nurses with baccalaureate degrees are unlikely to have received substantial training in Epidemiology, organizational theory, public policy, and related subjects that are integral to public health practice. Equipping PHNs with the skills needed for a public health model of practice may require consideration of educational reforms such as joint RN and MPH degree programs and more intensive and sustained continuing education models.

- Critically appraise the organizational and financial constraints of local public health departments that result in prioritizing PHN activities in direct, individual level care rather than population health. Health departments should engage in a formal planning process to evaluate the roles of PHNs in their departments, and to evaluate strategies for enhancing the full value of PHNs as a public health resource.

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APPENDIX

The following are the questionnaire items on interventions

INTERVENTION
A. **Case management for individual/families** E.g. - *Coordinate services for individual/families. Link individual/family to needed services such as screening, counseling and medical and social services.*
B. **Coalition building at the system level** E.g. - *Create a coalition that works with county or state officials to develop ordinances to increase license fees for tobacco vendors, establish compliance checks to monitor sales to minors, and limit tobacco advertising.*
C. **Community organizing** E.g. – *Lead or participate in community meetings and decision-making about response to meningitis outbreak.*
D. **Counseling/advocacy for individuals/families** E.g. – *Assist woman who is being abused by husband to consider resources and options for action and develop a safety plan.*
E. **Counseling/advocacy for communities** E.g. - *Participate in a crisis intervention team's response to teen suicides, which initiates information and counseling sessions with parents, clergy, teachers, law enforcement officials, students.*
F. **Counseling/advocacy at the system level** E.g. - *Testify at legislature on child abuse prevention through home visiting to secure increased funding for a home visiting program.*
G. **Delegated medical treatments and observations** E.g. - *Make home visit to client who was discharged from hospital; implement physician orders.*
H. **Disease investigation for individuals/families** E.g. - *Make follow-up home visit to family of child with positive TB screen; arrange for testing of entire family.*
J. **Health teaching at the community level** E.g. – *Develop health education programs for specific diseases; link community members to teach each other about health issues.*

(continued)

INTERVENTION
K. Outreach/case finding for individuals/families E.g. – *Contact high-risk pregnant women to assure access to prenatal care, decrease substance abuse and provide education on childbirth and parenting.*
L. Outreach/case finding at the system level E.g. - *Develop a countywide system to identify children with asthma using hospital data.*
M. Policy development at the community level E.g. - *Establish task force to study prevention of teen pregnancy in local school district; make recommendations to board and obtain support to apply for funding for special project.*
N. Policy development at the system level E.g. – *Lead or participate on committee/ panel to develop policies to address access to care for the uninsured in the county's clinics and hospitals.*
O. Screening for individuals/families E.g. - *Conduct home safety checks on home visits to families with young children.*
P. Screening at the community level E.g. - *Coordinate screening programs in schools that include initial screenings, rescreening, and follow-up.*
Q. Social marketing E.g. - *Plan publicity through radio/newspaper campaign for program that provides assisted living services.*
R. Surveillance at the community le vel E.g. - *Collect data on work-related injury, disease, and death; determine important health risks and develop programs to promote occupational health.*
S. Surveillance at the system level E.g. – *Respond to citizen's concerns about industrial toxic hazards; design with business owners regulatory ordinances to monitor and diminish hazards.*
Other types of interventions not listed above: **T.** _____
U. _____
V. _____