



## The Community Health Center Workforce in New York

---



School of Public Health  
University at Albany, State University of New York

# **The Community Health Center Workforce in New York**

**August 2011**

## **The Center for Health Workforce Studies**

School of Public Health, University at Albany

State University of New York

One University Place, Suite 220

Rensselaer, NY 12144-3445

(518) 402-0250

<http://chws.albany.edu/>



*Better Information for Better Outcomes*

*The Center for Health Workforce Studies is a not-for-profit research organization whose mission is to provide timely, accurate data and conduct policy-relevant research about the health workforce. The Center's work assists health, professional, and education organizations; policy makers and planners; and other stakeholders to understand issues related to the supply, demand, distribution, and use of health workers.*

## PREFACE

An adequate supply of appropriately trained health workers is essential to both access and quality of health care. Community health centers (CHCs), located in underserved communities and serving high need populations, face particularly difficult challenges in the recruitment and retention of well-qualified staff, particularly in times of health workforce shortages. CHCs are also key to the success of recent health reform initiatives. To better understand the health workforce of CHCs, the Center for Health Workforce Studies, in collaboration with the Community Health Care Association of New York State (CHCANYS) and the City University of New York (CUNY), conducted a study of the CHC workforce in New York. This report describes findings from a survey of the federally qualified health centers (FQHC) and FQHC lookalikes that are CHCANYS members in New York. The survey asked about staffing levels, recruitment and retention difficulties, and the support services that CHCs would like CHCANYS to offer to assist with recruitment and retention. The purpose of the study was to inform CHCs, CHCANYS, CUNY, and other stakeholders about the composition of the CHC health workforce and the recruitment and retention issues that CHCs face.

The Center for Health Workforce Studies at the School of Public Health, University at Albany, conducted the research and produced this report. The Center is a not-for-profit research organization with a mission to provide timely, accurate data and conduct policy-relevant research about the health workforce. Several Center staff members contributed to the development of this report, including Sandra McGinnis, Robert Martiniano, and Jean Moore.

## Table of Contents

EXECUTIVE SUMMARY .....	4
Background.....	4
Methods.....	4
Key Findings.....	5
THE CHC WORKFORCE .....	9
Background.....	9
Methods.....	9
Results.....	10
The Primary Care Workforce.....	17
The Nursing Workforce .....	27
Behavioral Health Providers .....	33
Oral Health Providers .....	38
Ancillary Providers .....	45
Reported Workforce Support Needs.....	53
CONCLUSIONS.....	60

## EXECUTIVE SUMMARY

### Background

The health care delivery system in New York is undergoing rapid transformation, driven in part by the state's Medicaid Redesign Plan and by the anticipated implementation of health care reform initiatives included in the federal Patient Protection and Affordable Care Act. It is expected that these changes will lead to an increasing emphasis on accessible and cost-effective primary and preventive health care services. Community health centers (CHCs) are an integral part of the state's primary care service delivery system. CHCs are also key to the success of recent health reform initiatives.

CHCs are located in underserved communities and serve high need populations. They face particularly difficult challenges in the recruitment and retention of well-qualified staff, especially in times of health workforce shortages. To better understand the health workforce of CHCs, the Center for Health Workforce Studies, in collaboration with the Community Health Care Association of New York State (CHCANYS) and the City University of New York (CUNY), conducted a study of the CHC workforce in New York. This report describes findings from a survey of the state's CHCs that asked about staffing levels, recruitment and retention difficulties, and the support services that CHCs would like CHCANYS to offer to assist with recruitment and retention.

### Methods

Data for this report were drawn from a survey conducted by the Center for Health Workforce Studies of CHCs, federally qualified health centers (FQHCs), and FQHC lookalikes that are CHCANYS members in New York. The surveys were sent to 63 CHCs in New York in March 2011. Of these, 40 CHCs (63%) responded, although five did not complete the survey in its entirety. The responding CHCs were not appreciably different in their geographic distribution from all CHCs in New York.

The survey asked the CHCs about currently filled and vacant full-time equivalents (FTEs) for 28 clinical occupations and professions in the areas of primary care, nursing, behavioral health, oral health, and ancillary care, as well as the difficulty of recruitment and retention for each of these providers on a 5-point scale.<sup>1</sup> The survey also asked the CHCs about their anticipated number of budgeted FTEs as of December 31, 2011. Finally, the survey asked the CHCs what support services they would like CHCANYS to offer to assist with recruitment and retention of health professionals and what languages other than English they needed in order to provide culturally competent care.

Responses were analyzed overall and by size and location of the CHC. The size variable was calculated based on the number of total FTEs reported in the 28 categories included on the survey. We defined small CHCs as those with fewer than 30 FTEs in these categories, medium CHCs as those with 30 to 49 FTEs, and large CHCs as those with 50 FTEs or more. Location

---

<sup>1</sup> (The recruitment scale ranged from 1=not at all difficult to 5=extremely difficult; while the retention scale ranged from 1=no turnover to 5=extreme turnover. Both scales are best used for comparative rankings of the most and least difficult occupations to recruit and retain rather than being interpreted literally.)

was based on New York City/upstate location and rural/urban status. New York City included the five boroughs of New York City, while the rest of the state was defined as upstate. Rural/urban status was determined based on the status of the county where the main site was located according to the Eberts' typology.<sup>2</sup>

Vacancy rates were calculated by dividing the number of vacant FTEs for each occupation across all CHCs by the number of total FTEs (vacant plus filled) for that occupation across all CHCs.<sup>3</sup>

Data on anticipated increases or decreases in staffing are likely to be underestimates as many CHCs did not complete this section of the survey. The numbers given are from the CHCs that reported these plans, but others that had these plans may have skipped the section. When it is said that “nine CHCs anticipated adding positions for dental assistants” this should be interpreted as “nine CHCs reported plans to add dental assistants” or “at least nine CHCs planned to add dental assistants.” These numbers are not presented as percentages because the valid denominator is not known (i.e., if the question remained blank, we don't know if it was because of an absence of any plans or because the question was skipped).

It should be noted that the findings of the study overall are descriptive, and it is not possible, given the nature of the study, to make inferences or conclusions as to why the workforce is distributed in the manner described.

The key findings from the analysis of survey responses are highlighted below.

### **Key Findings**

- The CHCs that responded to the survey averaged 64 staff members (median = 43) in the specific categories queried, with a range of two to 311.
- The health care workers employed in the greatest numbers by these CHCs (in descending order) were medical assistants, licensed practical nurses (LPNs), family physicians, registered nurses (RNs), dental assistants, nurse practitioners, social workers, physician assistants, and dentists.
- Almost one-third of CHC providers were primary care providers<sup>4</sup>(30%), and just over one-third were in the category of nursing providers<sup>5</sup>(36%).
- The most difficult occupations to recruit (an average of >3 on a scale of 1=not at all difficult and 5=extremely difficult) were psychiatrists, geriatric nurse practitioners,

---

<sup>2</sup> Ebert's typology, defined in state Public Health Law, defines counties as rural if the county's total population is less than 200,000.

<sup>3</sup> The vacancy rates were calculated across all CHCs rather than calculating a vacancy rate for each CHC and averaging them because the latter method resulted in some highly skewed figures as a consequence of some CHCs having 100% vacancy rates for some occupations.

<sup>4</sup> Primary care is defined as family/general practice physicians, internists, Ob/Gyns, pediatricians, adult nurse practitioners, pediatric nurse practitioners, family nurse practitioners, geriatric nurse practitioners, physician assistants, and midwives.

<sup>5</sup> Nursing categories included RNs, LPNs, medical assistants, and certified nursing aides.

obstetrician/ gynecologists (Ob/Gyns), and psychiatric nurse practitioners. Occupations with relatively little recruitment difficulty (an average of <2) were dental assistants, medical assistants, and certified nursing aides.

- The most difficult retention was reported for LPNs (2.44), followed by internists (2.29) and medical assistants (2.26). The least difficult retention was reported for dental hygienists (1.61).
- CHCs reported an average vacancy rate of 25% for psychiatrists and psychiatric nurse practitioners. Ob/Gyns, social workers, internists, and family nurse practitioners were also particularly problematic, with average vacancy rates of over 15%.

### *Primary Care*

- Almost 43% of primary care providers working in small CHCs were family physicians or internists, compared to only 29% in medium CHCs and 34% in large CHCs. Physician assistants were more heavily relied upon in the larger CHCs, where they represented 21% of reported primary care providers.
- Rural CHCs relied much more heavily on physician assistants to provide primary care compared to urban CHCs, in both upstate and New York City. Rural CHCs also had far fewer Ob/Gyns and pediatricians.<sup>6</sup>
- Rural upstate CHCs reported the most difficulty recruiting every type of primary care professional, as shown in Table 4. New York City CHCs generally reported the least difficulty recruiting primary care professionals, with the exception of pediatricians, pediatric nurse practitioners, family nurse practitioners, geriatric nurse practitioners, and midwives. In contrast, however, rural upstate CHCs tended to have the easiest time retaining their primary care providers, except for family physicians and internists.

### *Nursing*

- The ratio of RNs to primary care providers was highest in medium-sized CHCs and New York City CHCs.
- New York City CHCs relied much more heavily on medical assistants and employed fewer LPNs and RNs compared to upstate CHCs (both rural and urban).

### *Behavioral Health*

- New York City CHCs relied heavily on social workers, who constituted fully half of their behavioral health workers. Case managers constituted another one-quarter. Similarly,

---

<sup>6</sup> Although these statements seem inconsistent, CHC size was not strongly correlated with location. Although urban CHCs probably had larger sites, rural CHCs were likely to have multiple sites so that the total staff size of the rural CHCs was sometimes fairly large.

rural upstate CHCs relied heavily on social workers and almost as many case managers. Rural upstate CHCs, however, had more psychologists and psychiatric nurse practitioners on staff and did not employ psychiatrists. Urban upstate CHCs had a behavioral health profile that was heavily skewed to substance abuse counselors, who constituted over 40% of their behavioral health staff.

### *Oral Health*

- New York City CHCs had, by far, the highest proportion of dentists and lowest proportion of dental assistants among their oral health providers. Rural upstate CHCs had the lowest proportion of dentists and the highest proportion of dental assistants. Urban upstate CHCs had the highest proportion of dental hygienists in their oral health workforce.
- Nearly one-quarter of CHCs reported plans to increase the number of budgeted positions for dental assistants.

### *Ancillary Providers*

- Nutrition educators were considerably more common in urban upstate CHCs than in either New York City or rural upstate CHCs. In contrast, health educators were almost exclusively used in New York City CHCs, where they were the most common type of ancillary provider. HIV counselors were found in urban CHCs (both upstate and New York City), but not in rural CHCs. Patient health navigators were overwhelmingly found in urban upstate CHCs, and although they were the most common type of ancillary providers in rural upstate CHCs, they were found in much smaller numbers.

### *Reported Workforce Support Needs*

- Twenty-six percent of CHCs reported they would like CHCANYS to offer student internships to medical students to assist CHCs' recruitment efforts, while 23% reported they would like CHCANYS to offer nursing internships and 21% reported they would like CHCANYS to offer internships for medical assistants.
- Demand for student internships was generally highest in large CHCs, followed by small CHCs. The least demand for student internships was in medium-sized CHCs.
- One-third of CHCs reported they would like SEARCH/clinical rotations for doctors of medicine physicians (MDs) and 23% reported they would like SEARCH/clinical rotations for dentists.
- Rural upstate CHCs did not report interest in SEARCH/clinical rotations for any providers except nurse practitioners, MDs, and doctors of osteopathic medicine (DOs). SEARCH/clinical rotations for nurse practitioners were not desired by many New York City or urban upstate CHCs, but the most desired SEARCH/clinical rotations for both New York City and urban upstate CHCs were MDs (but not DOs) and dentists.



- Over half of CHCs indicated they would like CHCANYS to offer recruitment materials, a loan repayment program, credentialing, e-mail alerts of employment opportunities, and linkages to academic institutions.
- All retention supports cited in the survey (clinical training, administrative training, billing and coding training, workflow training, staff satisfaction surveys, and lunch and learn series) were desired by at least half of CHCs.
- The majority of urban upstate CHCs (60%) were interested in hosting an administrative mentorship, yet only 17% of New York City CHCs and no rural upstate CHCs reported interest in hosting such a mentorship.
- Language needs varied, as expected, by CHC size and location. Among all sizes and locations, however, by far the top language need was Spanish.

## **THE CHC WORKFORCE**

### **Background**

The health care delivery system in New York is undergoing rapid transformation, driven in part by the state's Medicaid Redesign Plan and by the anticipated implementation of health care reform initiatives included in the federal Patient Protection and Affordable Care Act. It is expected that these changes will lead to an increasing emphasis on accessible and cost-effective primary and preventive health care services. Community health centers (CHCs) are an integral part of the state's primary care service delivery system. CHCs are also key to the success of recent health reform initiatives.

CHCs are located in underserved communities and serve high need populations. They face particularly difficult challenges in the recruitment and retention of well-qualified staff, especially in times of health workforce shortages. To better understand the health workforce of CHCs, the Center for Health Workforce Studies, in collaboration with the Community Health Care Association of New York State (CHCANYS) and the City University of New York (CUNY), conducted a study of the CHC workforce in New York. This report describes findings from a survey of the state's CHCs that asked about staffing levels, recruitment and retention difficulties, and the support services that CHCs would like CHCANYS to offer to assist with recruitment and retention.

### **Methods**

Data for this report were drawn from a survey conducted by the Center for Health Workforce Studies of CHCs, federally qualified health centers (FQHCs), and FQHC lookalikes that are CHCANYS members in New York. The surveys were sent to 63 CHCs in New York in March 2011. Of these, 40 CHCs (63%) responded, although five did not complete the survey in its entirety. The responding CHCs were not appreciably different in their geographic distribution from all CHCs in New York.

The survey asked the CHCs about currently filled and vacant full-time equivalents (FTEs) for 28 clinical occupations and professions in the areas of primary care, nursing, behavioral health, oral health, and ancillary care, as well as the difficulty of recruitment and retention for each of these providers on a 5-point scale.<sup>7</sup> The survey also asked the CHCs about their anticipated number of budgeted FTEs as of December 31, 2011. Finally, the survey asked the CHCs what support services they would like CHCANYS to offer to assist with recruitment and retention of health professionals and what languages other than English they needed in order to provide culturally competent care.

Responses were analyzed overall and by size and location of the CHC. The size variable was calculated based on the number of total FTEs reported in the 28 categories included on the

---

<sup>7</sup> (The recruitment scale ranged from 1=not at all difficult to 5=extremely difficult; while the retention scale ranged from 1=no turnover to 5=extreme turnover. Both scales are best used for comparative rankings of the most and least difficult occupations to recruit and retain rather than being interpreted literally.)

survey. We defined small CHCs as those with fewer than 30 FTEs in these categories, medium CHCs as those with 30 to 49 FTEs, and large CHCs as those with 50 FTEs or more. Location was based on New York City/upstate location and rural/urban status. New York City included the five boroughs of New York City, while the rest of the state was defined as upstate. Rural/urban status was determined based on the status of the county where the main site was located according to the Eberts' typology.<sup>8</sup>

Vacancy rates were calculated by dividing the number of vacant FTEs for each occupation across all CHCs by the number of total FTEs (vacant plus filled) for that occupation across all CHCs.<sup>9</sup>

Data on anticipated increases or decreases in staffing are likely to be underestimates as many CHCs did not complete this section of the survey. The numbers given are from the CHCs that reported these plans, but others that had these plans may have skipped the section. When it is said that “nine CHCs anticipated adding positions for dental assistants” this should be interpreted as “nine CHCs *reported* plans to add dental assistants” or “*at least* nine CHCs planned to add dental assistants.” These numbers are not presented as percentages because the valid denominator is not known (i.e., if the question remained blank, we don't know if it was because of an absence of any plans or because the question was skipped).

It should be noted that the findings of the study overall are descriptive, and it is not possible, given the nature of the study, to make inferences or conclusions as to why the workforce is distributed in the manner described.

## **Results**

### *Total Staffing*

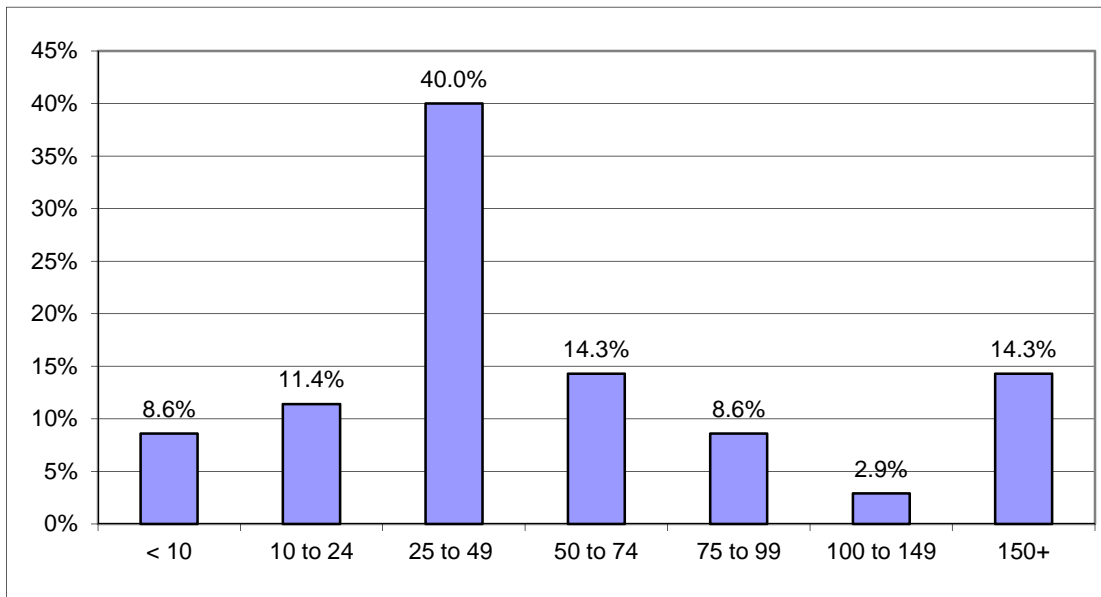
The CHCs that responded to the survey averaged 64 FTEs (median = 43) in the specific categories queried (primary care, nursing, behavioral health, oral health, and ancillary), with a range of two to 311. The distribution is shown in Figure 1.

---

<sup>8</sup> Ebert's typology, defined in state Public Health Law, defines counties as rural if the county's total population is less than 200,000.

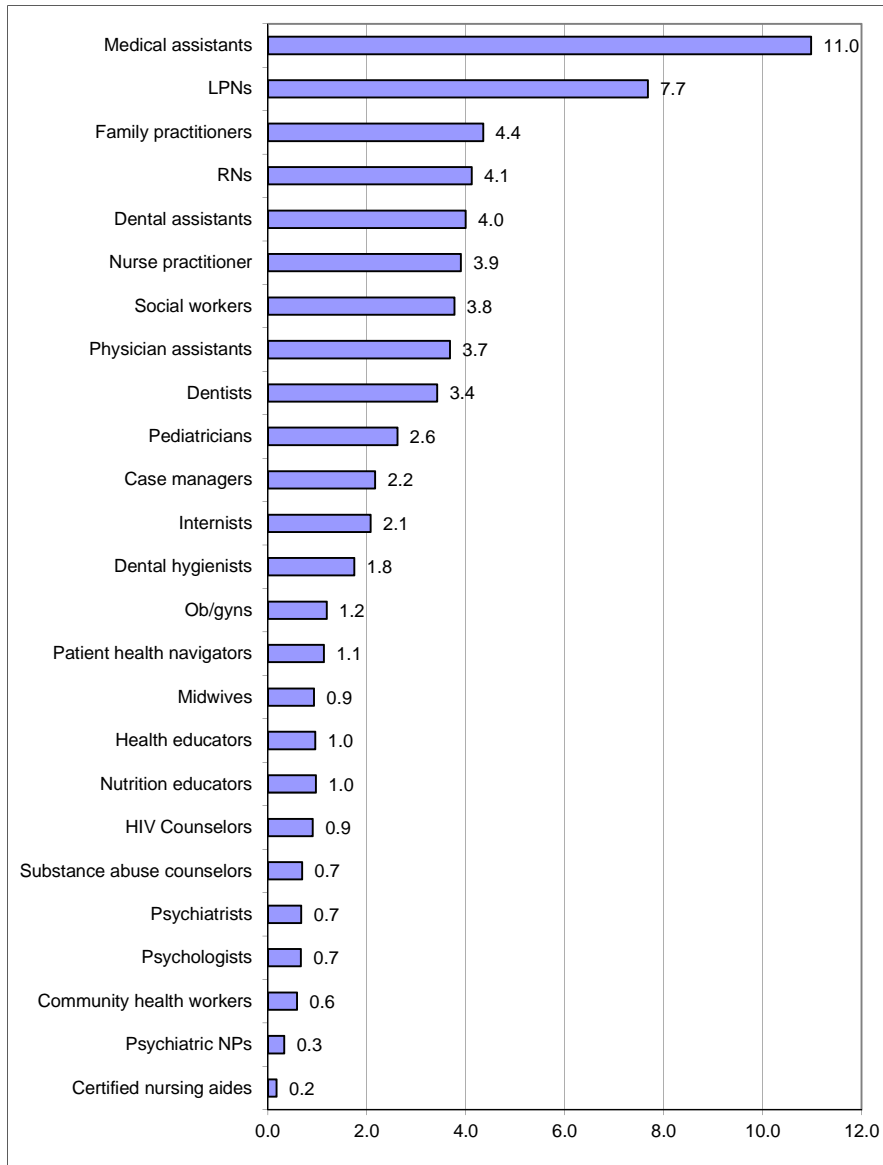
<sup>9</sup> The vacancy rates were calculated across all CHCs rather than calculating a vacancy rate for each CHC and averaging them because the latter method resulted in some highly skewed figures as a consequence of some CHCs having 100% vacancy rates for some occupations.

**Figure 1. Number of FTEs (Total Staff) in Responding CHCs in New York**



The health care workers employed in the greatest numbers by CHCs (in descending order) were medical assistants, licensed practical nurses (LPNs), family physicians, registered nurses (RNs), dental assistants, nurse practitioners, social workers, physician assistants, and dentists. Figure 2 shows the average number employed in each occupation at responding CHCs. Only one CHC reported employing a geriatric nurse practitioner, three reported using certified nursing aides, and five reported using psychiatric nurse practitioners.

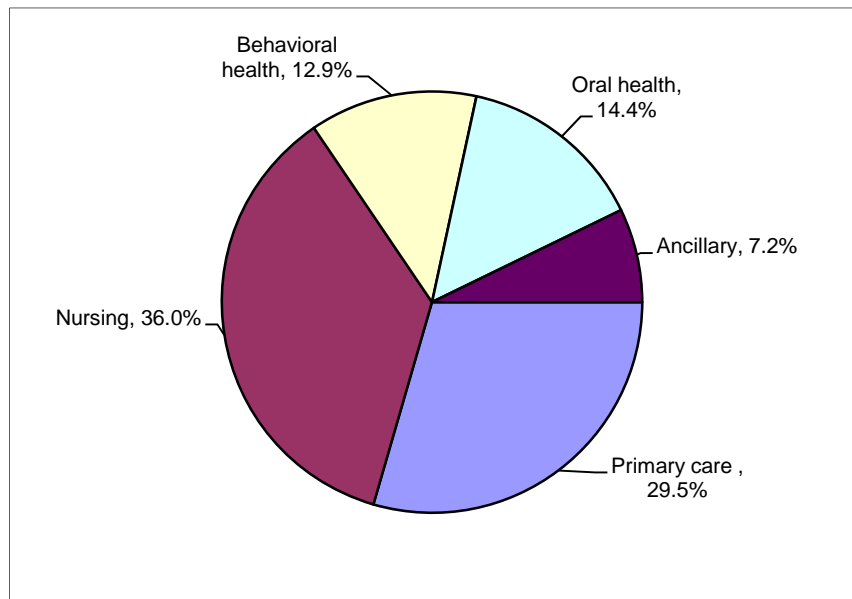
**Figure 2. Average Number Employed by CHCs in New York, in Descending Order**



### Staffing by Category

Figure 3 shows the percentage of health care workers employed in CHCs that provided five major categories of services.<sup>10</sup> Almost one-third of CHC health care workers were primary care providers (30%) and over one-third were nursing staff (36%).

**Figure 3. CHC Workers in New York by Provider Category**



Note: This figure is based on the sum of providers in each category across all CHCs. Elsewhere in the report, the average percent of providers in each category is calculated by averaging the percentages reported by each CHC in that category.

### Recruitment and Retention

As mentioned previously, on a comparative basis, the most difficult occupations to recruit (an average of >3 on a scale of 1=not at all difficult and 5=extremely difficult) were psychiatrists, geriatric nurse practitioners, Ob/Gyns, and psychiatric nurse practitioners. Occupations with relatively little recruitment difficulty (an average of <2) were dental assistants, medical assistants, and certified nursing aides.

No occupation averaged more than a 3 for retention difficulty (1=no turnover; 5=extreme turnover). The most difficult retention was reported for LPNs (2.44), followed by internists (2.29) and medical assistants (2.26). The least difficult retention was reported for dental hygienists (1.61).

<sup>10</sup> Primary care category included family/general practice physicians, internists, Ob/Gyns, pediatricians, adult nurse practitioners, pediatric nurse practitioners, family nurse practitioners, geriatric nurse practitioners, physician assistants, and midwives. Nursing category included RNs, LPNs, medical assistants, and certified nursing aides. Behavioral health category included psychiatrists, psychologists, psychiatric nurse practitioners, social workers, case managers, and substance abuse counselors. Oral health category included dentists, dental hygienists, and dental assistants/aides/technicians. Ancillary staff category included nutritionists/nutrition educators, health educators, HIV counselors, patient health navigators, and community health workers.

**Table 1. Average Reported Recruitment and Retention Difficulty by Occupation, in Descending Order of Recruitment Difficulty**

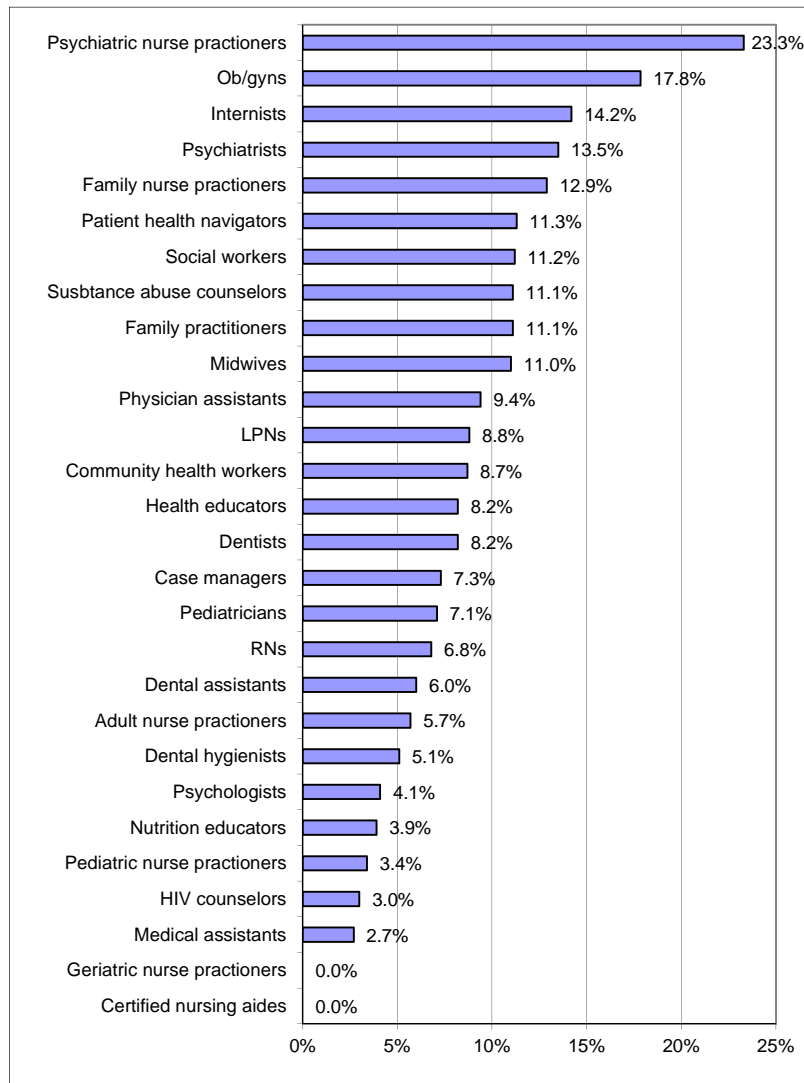
	Recruitment	Retention
Psychiatrists	3.58	2.21
Geriatric nurse practitioners	3.36	1.91
Ob/Gyns	3.24	2.04
Psychiatric nurse practitioners	3.20	2.21
Dentists	3.00	2.11
Family physicians	2.98	2.11
Social workers	2.80	2.00
Psychologists	2.78	2.19
Nutrition educators	2.73	1.65
Internists	2.70	2.29
Pediatric nurse practitioners	2.67	1.95
Family nurse practitioners	2.65	2.06
RNs	2.65	2.16
Midwives	2.57	2.00
Adult nurse practitioners	2.52	2.07
Dental hygienists	2.44	1.61
Pediatricians	2.38	1.84
Substance abuse counselors	2.30	2.00
LPNs	2.27	2.44
Patient health navigators	2.24	1.75
Community health workers	2.18	2.00
Health educators	2.15	1.89
Physician assistants	2.15	1.94
Case managers	2.04	1.96
HIV counselors	2.00	1.95
Dental assistants	1.88	1.73
Medical assistants	1.34	2.26
Certified nursing aides	1.33	1.79

### *Vacancies*

Vacancy rates were calculated by dividing the number of vacant FTEs for each occupation across all CHCs by the number of total FTEs (vacant plus filled) for that occupation across all CHCs.<sup>11</sup> These rates were high for many occupations, with 23% of budgeted FTEs for psychiatric nurse practitioners and 18% of budgeted FTEs for Ob/Gyns currently vacant. Internists, psychiatrists, family nurse practitioners were also particularly problematic, with more than 12% of budgeted FTEs vacant. Vacancy rates for geriatric nurse practitioners were low despite a high reported difficulty of recruitment.

<sup>11</sup> The vacancy rates were calculated across all CHCs rather than calculating a vacancy rate for each CHC and averaging them because the latter method resulted in some highly skewed figures as a consequence of some CHCs having 100% vacancy rates for some occupations.

**Figure 4. Average Vacancy Rates by Occupation, in Descending Order**

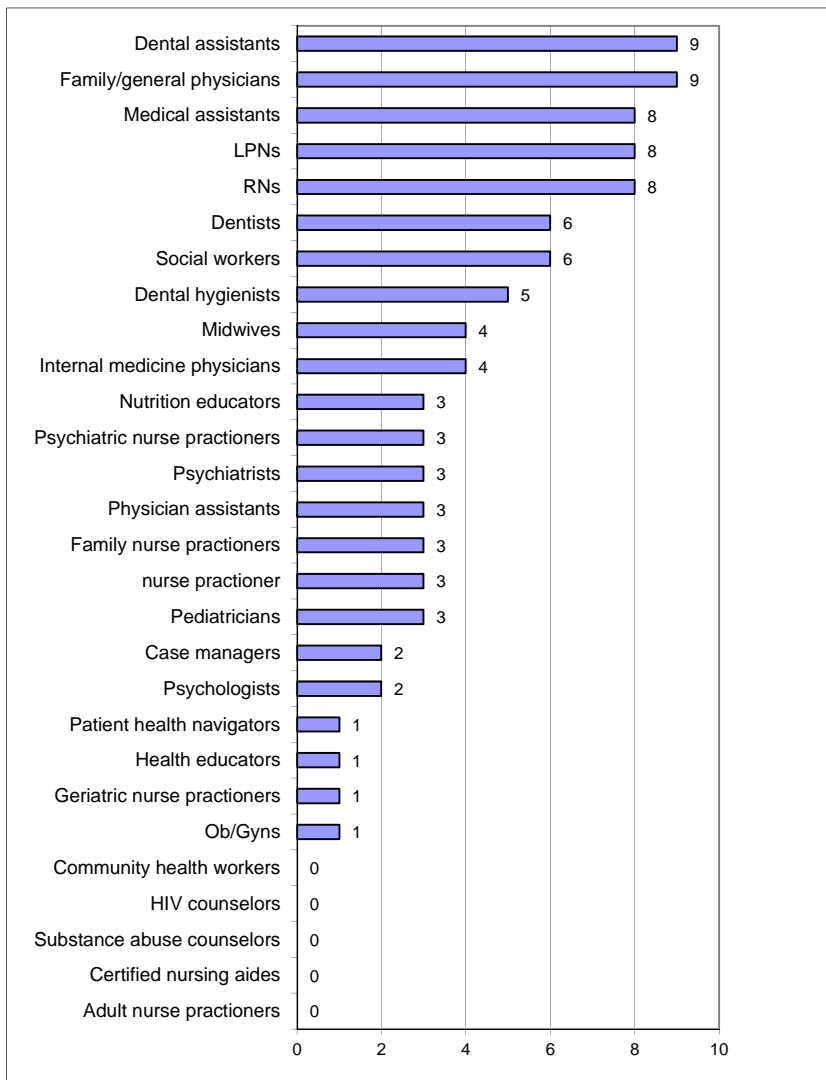


*Anticipated Growth*

Most CHCs anticipated adding budgeted positions by the end of 2011. Figure 5 shows the number of CHCs anticipating adding staff in each occupation. Nearly one-quarter of CHCs (23%) planned to add positions for dental assistants and family/general physicians, while another 20% planned to add positions for medical assistants, LPNs, and RNs.



**Figure 5. Number of CHCs Anticipating Increasing FTEs by Occupation, in Descending Order**

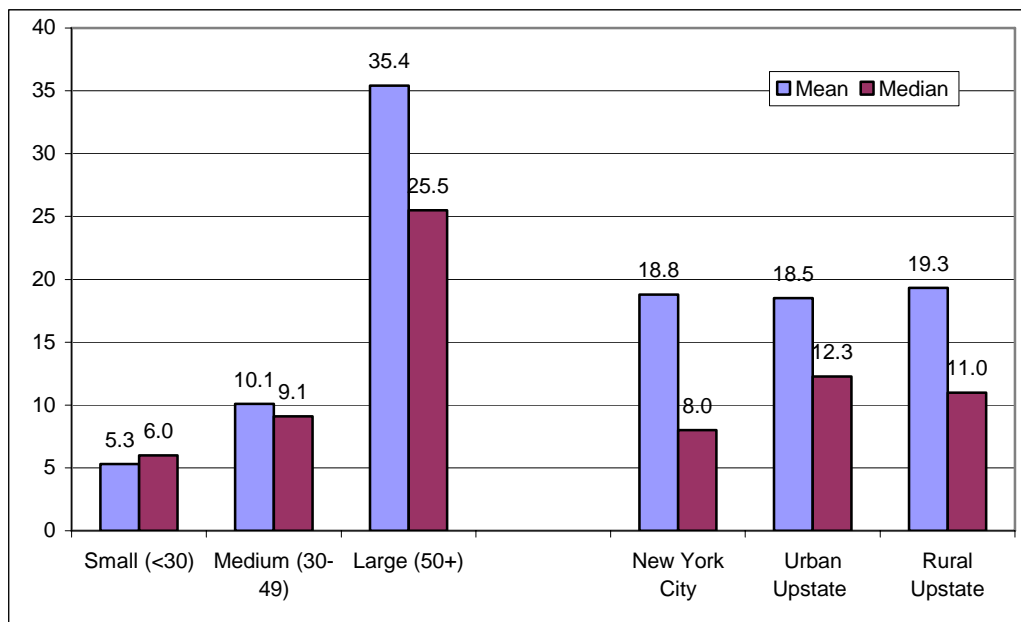


## The Primary Care Workforce

For the purposes of this report, the primary care workforce category includes family/general practice physicians, internists, Ob/Gyns, pediatricians, adult nurse practitioners, pediatric nurse practitioners, family nurse practitioners, geriatric nurse practitioners, physician assistants, and midwives. Throughout this section, the composition of the primary care workforce is compared by CHC size and location.

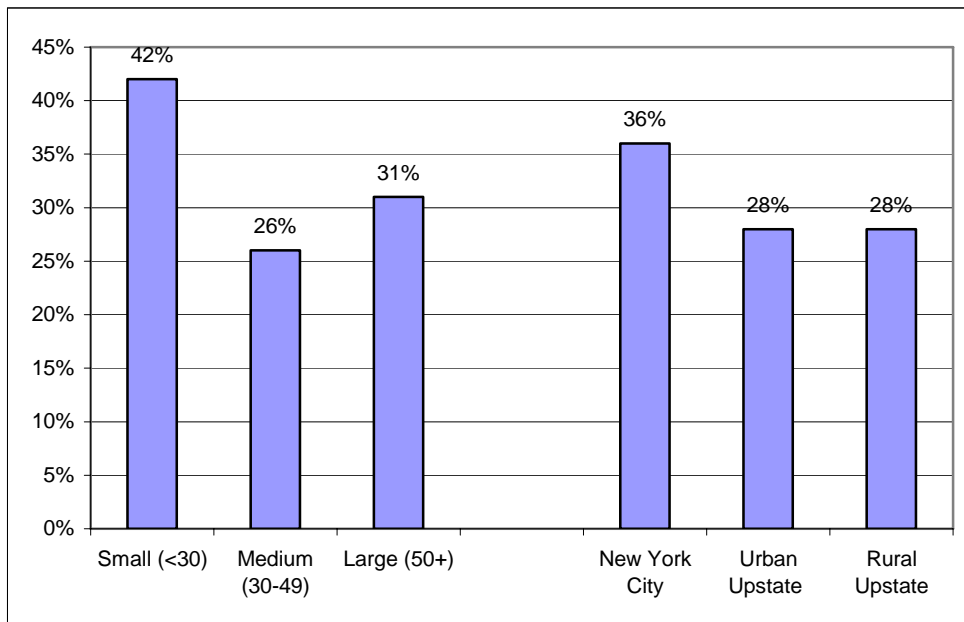
The average number of primary care providers per CHC varied by CHC size. Small CHCs averaged 5.3 primary care FTEs (median = 6.0), while medium-sized CHCs averaged 10.1 (median = 9.1), and large CHCs averaged 35.4 (median = 25.5). There was less variation by CHC location. New York City CHCs averaged 18.8 primary care FTEs (median = 8.0), while urban upstate CHCs averaged 18.5 (median = 12.3) and rural upstate CHCs averaged 19.3 (median = 11.0) (Figure 6).

**Figure 6. Mean and Median Number of Primary Care Providers Per CHC, by Size and Location**



Primary care providers constituted, on average, 32% of the health care FTEs at CHCs, although this varied by size. The smallest CHCs averaged 42% primary care FTEs, while medium-sized CHCs averaged 26% and large CHCs averaged 31%. These averages varied by CHC location. New York City CHCs averaged 36% primary care, while urban upstate CHCs averaged 28% and rural upstate CHCs averaged 28% (Figure 7).

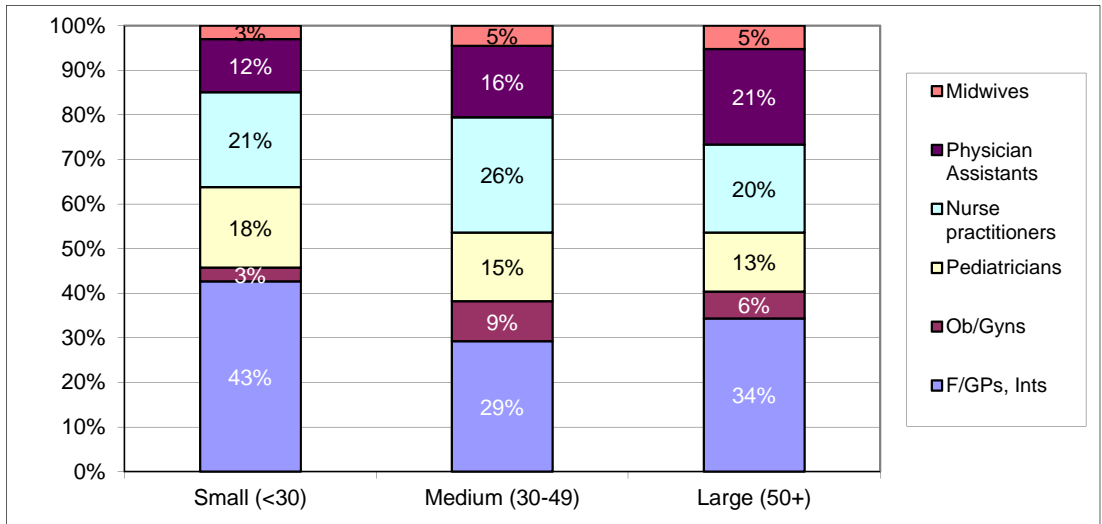
**Figure 7. Average Percentage of Workforce Constituted by Primary Care, by CHC Size and Location**



Note: This is the average of the percentages reported by each CHC, not an average of the total workforce across all CHCs.

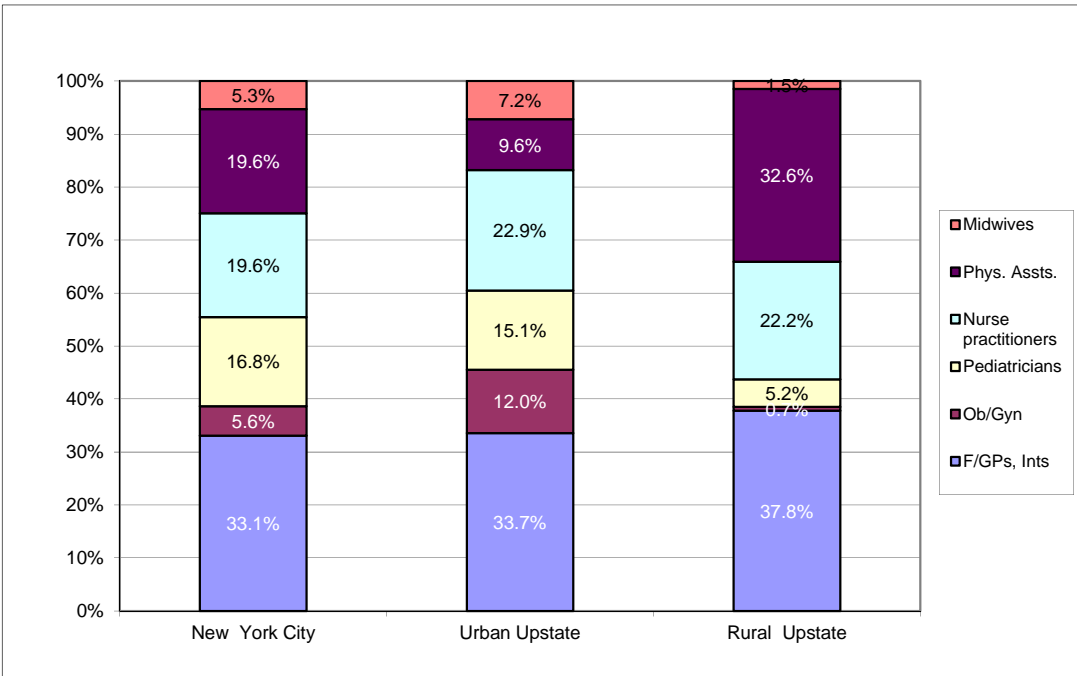
Figure 8 shows the percentage of primary care providers employed by small, medium, and large CHCs by profession. Almost 43% of primary care providers working in small CHCs were family physicians or internists, compared to only 29% in medium CHCs and 34% in large CHCs. Physician assistants were more heavily relied upon in the larger CHCs, where they represented 21% of reported primary care providers.

**Figure 8. Distribution of Primary Care Providers by Profession, by CHC Size**



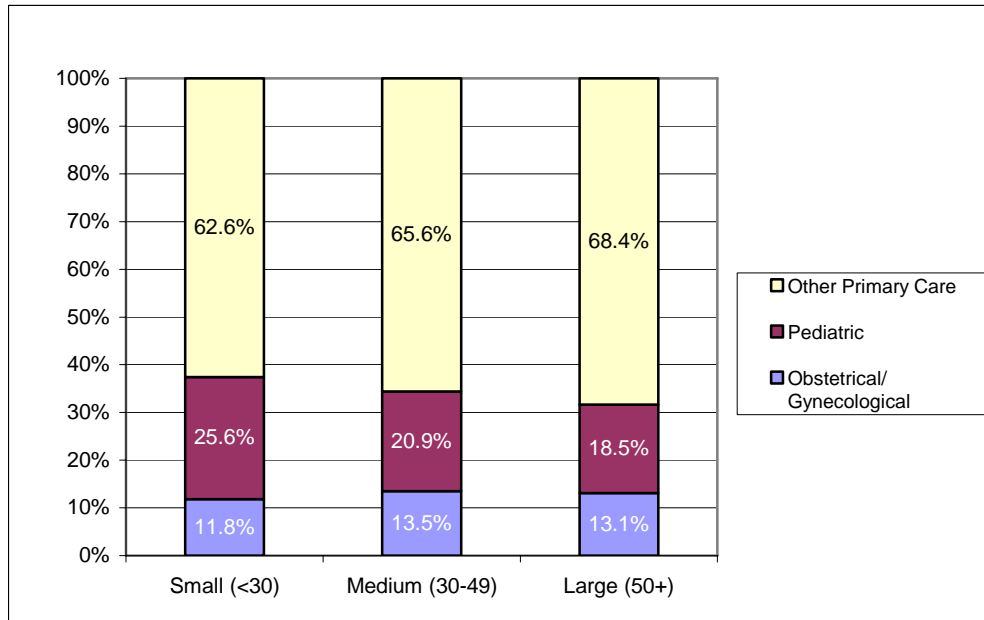
As shown in Figure 9, rural CHCs relied much more heavily on physician assistants to provide primary care compared to urban CHCs, either upstate and New York City. Rural CHCs also had far fewer Ob/Gyns and pediatricians.

**Figure 9. Distribution of Primary Care Providers by Profession, by Location**



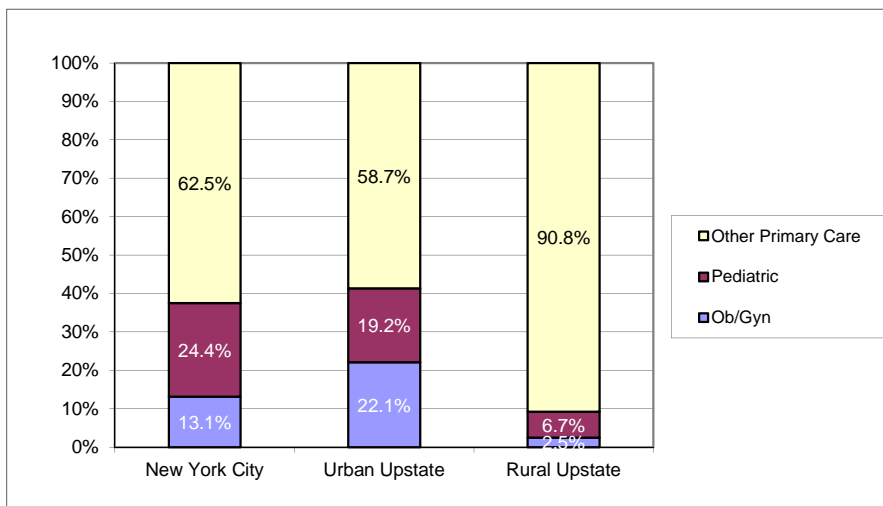
The percentage of primary care providers by specialty dedicated to obstetrical/gynecological care (Ob/Gyns and Midwives), pediatric care (pediatricians and pediatric nurse practitioners), and other primary care is shown in Figure 10 by CHC size. Ob/Gyns and midwives together constituted similar percentages of the primary care workforce in all CHCs regardless of size, but pediatricians and pediatric nurse practitioners together constituted a larger percentage of primary care providers in small CHCs (26%) and a smaller percentage in medium and large CHCs (21% and 19%, respectively).

**Figure 10. Specialty of Primary Care Providers, by CHC Size**



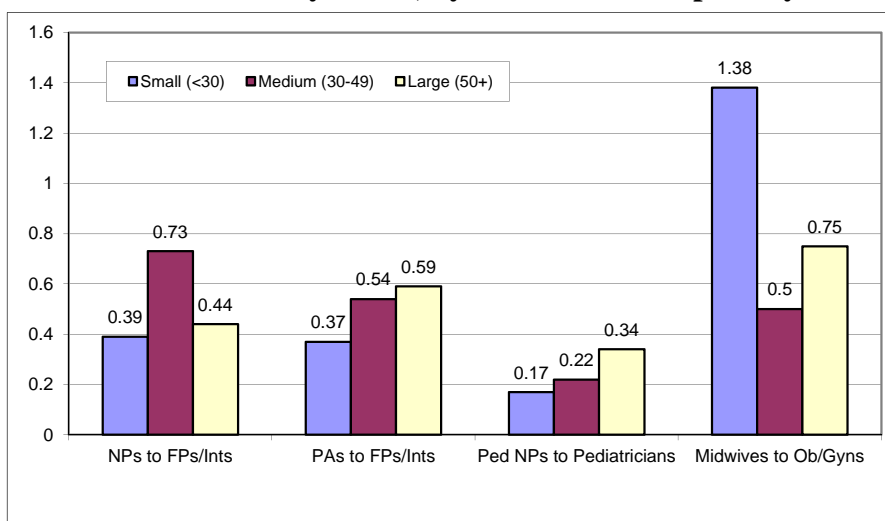
The percentage of primary care providers dedicated to obstetrical/gynecological and pediatric care is shown in Figure 11 by location. Ob/Gyns and midwives together constituted the largest percentage of the workforce in urban upstate CHCs (22%) and the smallest percentage in rural upstate CHCs (3%). Pediatricians and pediatric nurse practitioners together constituted a larger percentage of primary care providers in New York City CHCs (24%) and the smallest percentage in rural upstate CHCs (7%).

**Figure 11. Specialty of Primary Care Providers, by Location**



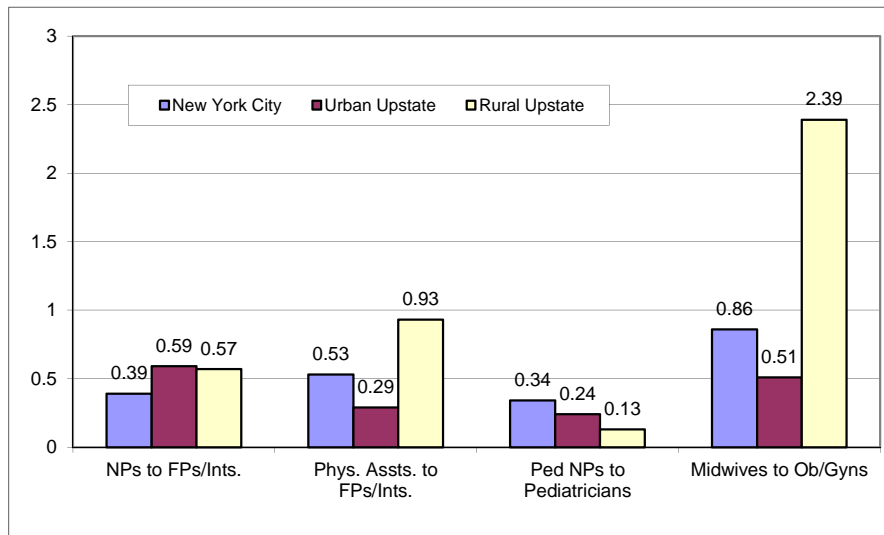
Reliance on nurse practitioners, physician assistants, and midwives rather than on physicians varied by CHC size, as shown in Figure 12. Generally, the larger CHCs had more nurse practitioners and physician assistants per physician. This was not true of the ratio of nurse practitioners to family physicians and internists, which was highest in medium-sized CHCs. Also, the small CHCs staffed more midwives than Ob/Gyns.

**Figure 12. Ratios of Nurse Practitioners and Physician Assistants to Primary Care Physicians, by CHC Size and Specialty**



Reliance on nurse practitioners, physician assistants, and midwives rather than on physicians varied by location, as shown in Figure 13. Upstate CHCs (regardless of rurality) used more nurse practitioners per family physician and internist than New York City CHCs, while rural upstate CHCs used the most physician assistants per family physician and internist. New York City CHCs used the most pediatric nurse practitioners per pediatrician, followed by urban upstate CHCs. Rural upstate CHCs used the most midwives per Ob/Gyn, by far, although the numbers were very small (2.39 Midwives to 1 Ob/Gyn), and New York City CHCs used more midwives per Ob/Gyn than urban upstate CHCs.

**Figure 13. Ratios of Nurse Practitioners, Physician Assistants, and Midwives to Primary Care Physicians, by Location and Specialty**



As seen in Table 2, among the primary care professions, physicians tended to be more difficult to recruit than nurse practitioners and physician assistants. The exception was pediatricians, who were among the easiest primary care professionals to recruit. The greatest retention problems were reported for internists, while pediatricians were the easiest profession to retain.<sup>12</sup>

<sup>12</sup> It should be noted, however, that there was relatively little variation, with the spread between the most and least retention difficulties only being 0.45 points.

**Table 2. Average Reported Recruitment and Retention Difficulty for Primary Care Professions, in Descending Order by Recruitment Difficulty**

	Recruitment	Retention
Geriatric nurse practitioners	3.36	1.91
Ob/Gyns	3.24	2.04
Family physicians	2.98	2.11
Internists	2.70	2.29
Pediatric nurse practitioners	2.67	1.95
Family nurse practitioners	2.65	2.06
Midwives	2.57	2.00
Adult nurse practitioners	2.52	2.07
Pediatricians	2.38	1.84
Physician assistants	2.15	1.94

Small CHCs almost always reported easier recruitment and retention of primary care providers than medium-sized CHCs, and large CHCs reported the most difficult recruitment and retention of primary care providers. In some cases, these differences were quite dramatic. The exceptions were that small CHCs reported more difficulty recruiting pediatric nurse practitioners and midwives than their medium and large counterparts.

**Table 3. Reported Difficulty of Recruitment and Retention of Primary Care Providers, by CHC Size**

	Recruitment			Retention		
	Small (<30)	Medium (30-49)	Large (50+)	Small (<30)	Medium (30-49)	Large (50+)
Family physicians	2.50	2.91	3.07	1.67	1.90	2.36
Internists	2.22	2.78	3.00	1.63	2.25	2.73
Ob/Gyns	2.43	3.25	4.00	1.17	1.86	2.44
Pediatricians	2.00	2.67	2.42	1.29	1.87	2.17
Adult nurse practitioners	2.13	2.50	2.58	1.29	2.00	2.25
Pediatric nurse practitioners	3.00	2.40	2.40	1.50	2.00	2.00
Family nurse practitioners	2.50	2.63	2.64	1.63	2.00	2.21
Geriatric nurse practitioners	4.00	2.67	3.75	1.00	2.00	1.83
Physician assistants	2.00	2.10	2.17	1.86	1.78	2.08
Midwives	3.00	2.00	2.80	1.67	1.60	2.45

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

Rural upstate CHCs reported the most difficulty recruiting every type of primary care professional, as shown in Table 4. New York City CHCs generally reported the least difficulty (with the exception of pediatricians, pediatric nurse practitioners, family nurse practitioners, geriatric nurse practitioners, and midwives). In contrast, however, rural upstate CHCs tended to have the easiest time retaining their primary care providers, except for family physicians and internists.



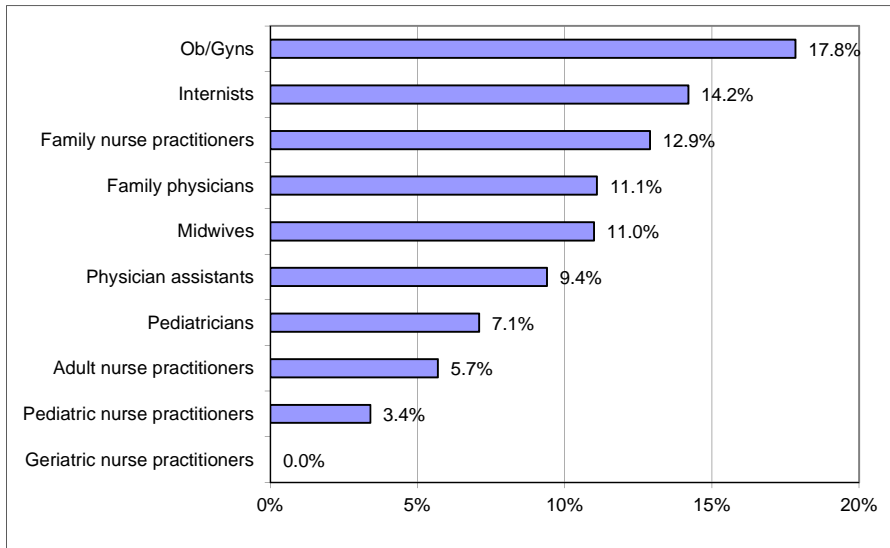
**Table 4. Reported Difficulty of Recruitment and Retention of Primary Care Providers, by Location**

	Recruitment			Retention		
	New York City	Urban Upstate	Rural Upstate	New York City	Urban Upstate	Rural Upstate
Family physicians	2.74	3.00	3.71	2.24	1.90	2.00
Internists	2.57	2.67	3.50	2.19	2.33	2.75
Ob/Gyns	3.05	3.29	4.33	2.18	2.14	1.00
Pediatricians	2.29	2.13	3.20	2.06	1.75	1.20
Adult nurse practitioners	2.33	2.43	3.50	2.06	2.63	1.00
Pediatric nurse practitioners	2.64	2.14	4.00	2.20	2.00	1.00
Family nurse practitioners	2.53	2.40	3.29	2.38	2.00	1.43
Geriatric nurse practitioners	3.20	2.33	4.67	2.75	1.75	1.00
Physician assistants	2.00	2.13	2.57	1.94	2.00	1.86
Midwives	2.64	2.17	3.00	2.38	1.71	1.00

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

The highest vacancy rates for the category of primary care providers were for Ob/Gyns (17.8%), internists (14.2%), and family nurse practitioners (12.9%). In contrast, positions budgeted for geriatric nurse practitioners and pediatric nurse practitioners were almost always filled.

**Figure 14. Vacancy Rates for Primary Care Providers by Profession, in Descending Order**



The positions most likely to be vacant, however, varied dramatically by CHC size, as shown below in Table 5. The highest proportions of unfilled positions reported by small CHCs were for midwives and Ob/Gyns, while among medium CHCs the most vacancies were for family nurse practitioners, family physicians, and physician assistants. In large CHCs, the most vacancies were for Ob/Gyns and internists.

**Table 5. Vacancy Rates for Primary Care Providers by CHC Size**

	Small (<30)	Medium (30-49)	Large (50+)
Family physicians	7.8%	17.5%	10.3%
Internists	0.0%	12.9%	15.7%
Ob/Gyns	38.5%	0.0%	18.9%
Pediatricians	17.4%	10.5%	4.4%
Adult nurse practitioners	0.0%	7.2%	0.0%
Pediatric nurse practitioners	0.0%	0.0%	4.3%
Family nurse practitioners	0.0%	17.6%	12.9%
Geriatric nurse practitioners	N/A	N/A	0.0%
Physician assistants	28.4%	14.4%	7.0%
Midwives	55.6%	0.0%	7.2%

Note: Categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing one of the three columns to order them by

Similarly, vacancies varied by location. In New York City CHCs, the occupations with the highest vacancy rates were reported for Ob/Gyns, family physicians, and midwives, while in urban upstate CHCs the occupations with the highest vacancy rates were internists and family nurse practitioners. Internists and physician assistants were the occupations with the highest vacancy rates in rural upstate CHCs.

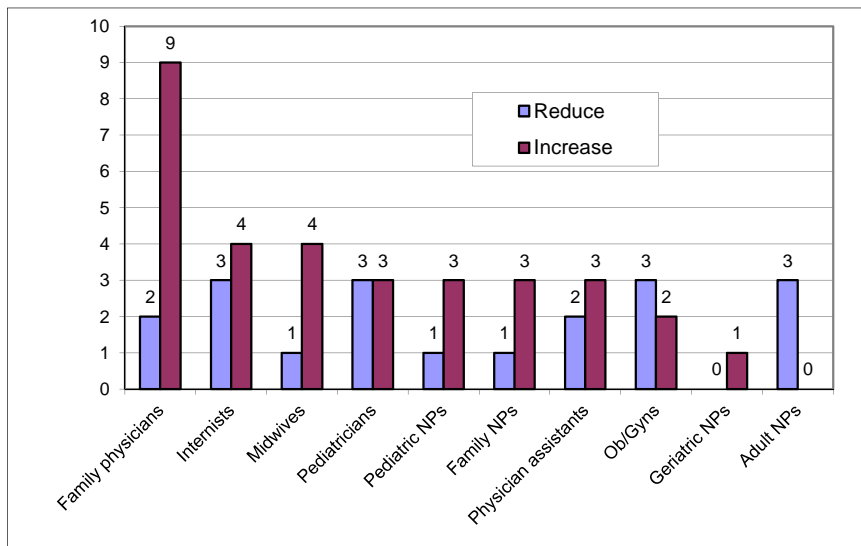
**Table 6. Vacancy Rates for Primary Care Providers by Location**

	New York City	Urban Upstate	Rural Upstate
Family physicians	14.1%	9.7%	7.2%
Internists	10.5%	24.4%	20.2%
Ob/Gyns	19.8%	16.4%	0.0%
Pediatricians	7.7%	3.9%	12.6%
Adult nurse practitioners	7.7%	0.0%	0.0%
Pediatric nurse practitioners	4.5%	0.0%	0.0%
Family nurse practitioners	7.4%	18.2%	12.4%
Geriatric nurse practitioners	N/A	0.0%	N/A
Physician assistants	2.8%	16.0%	16.1%
Midwives	13.9%	8.0%	0.0%

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

The number of CHCs that anticipated increases or decreases to budgeted positions, by profession, is shown below in Figure 15. Nearly one-quarter of CHCs (nine out of 40) reported plans to increase the positions budgeted for family physicians by the end of the year, and 10% reported plans to increase the positions budgeted for midwives. One CHC reported plans to add a family physician when they did not currently have one, one CHC reported plans to add a pediatrician when they did not currently have one, and other CHCs reported plans to add an adult nurse practitioner, pediatric nurse practitioner, and geriatric nurse practitioner when they did not currently have such positions. One CHC that did not have a midwife planned to add one, but another CHC planned to eliminate their only midwife position.

**Figure 15. Number of CHCs Reporting Plans to Reduce or Increase Budgeted Positions, by Profession, Ordered by Plans to Increase**



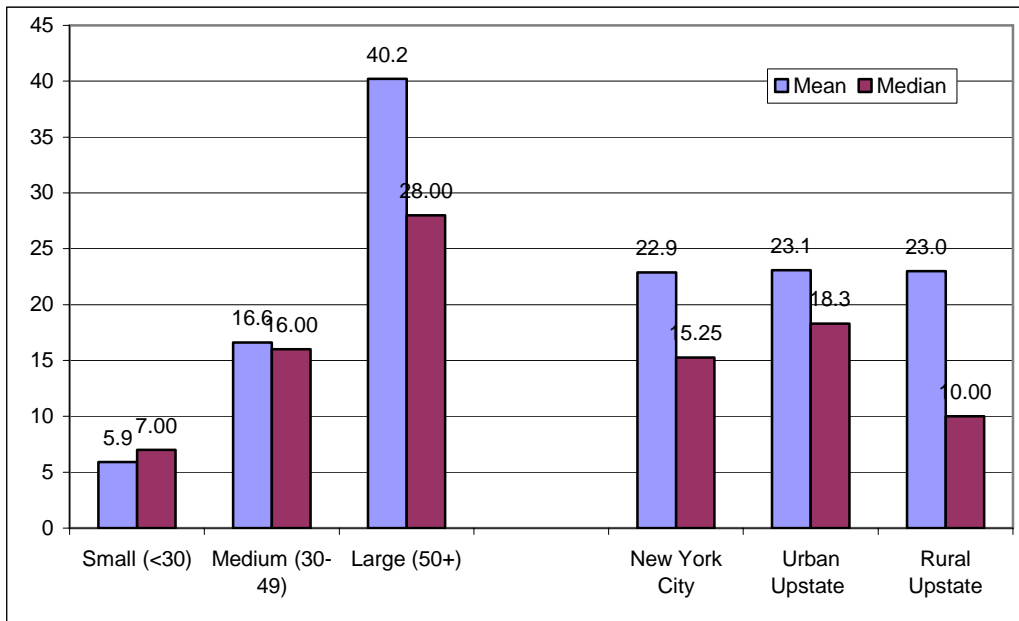
### *The Nursing Workforce*

As per the survey, nursing categories included RNs, LPNs, medical assistants, and certified nursing aides. Throughout this section, the composition of the nursing care workforce is compared by CHC size and location.

The average number of nursing care FTEs<sup>13</sup> per CHC varied by CHC size. Small CHCs averaged 5.9 nursing FTEs (median =7), while medium-sized CHCs averaged 16.6 (median = 16), and large CHCs averaged 40.2 (median = 28). There was less variation by CHC location. New York City CHCs averaged 22.9 nursing FTEs (median = 15.3), while urban upstate CHCs averaged 23.1 (median = 18.3) and upstate rural CHCs averaged 23.0 (median = 10.0) (Figure 16).

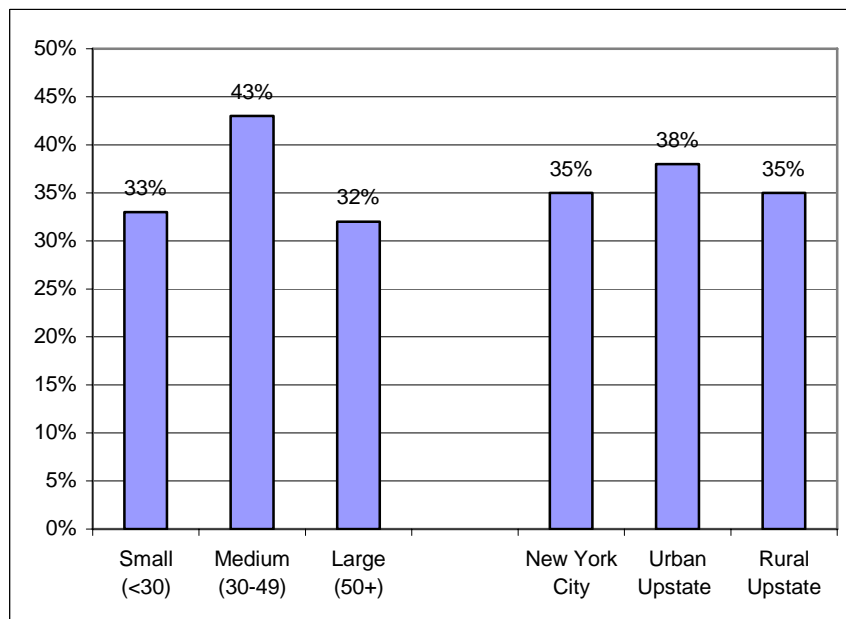
<sup>13</sup> Nursing providers include RNs, LPNs, medical assistants, and certified nursing aides.

**Figure 16. Mean and Median Number of Nursing Staff Per CHC, by Size and Location**



The category of nursing care providers constituted, on average, 36% of the health care FTEs at CHCs, although this varied by size. Small CHCs averaged 33% nursing FTEs, while medium-sized CHCs averaged 43% and large CHCs averaged 32%. There was little variation by CHC location. New York City CHCs averaged 35% nursing staff, while urban upstate CHCs averaged 38% and rural upstate CHCs averaged 35%.

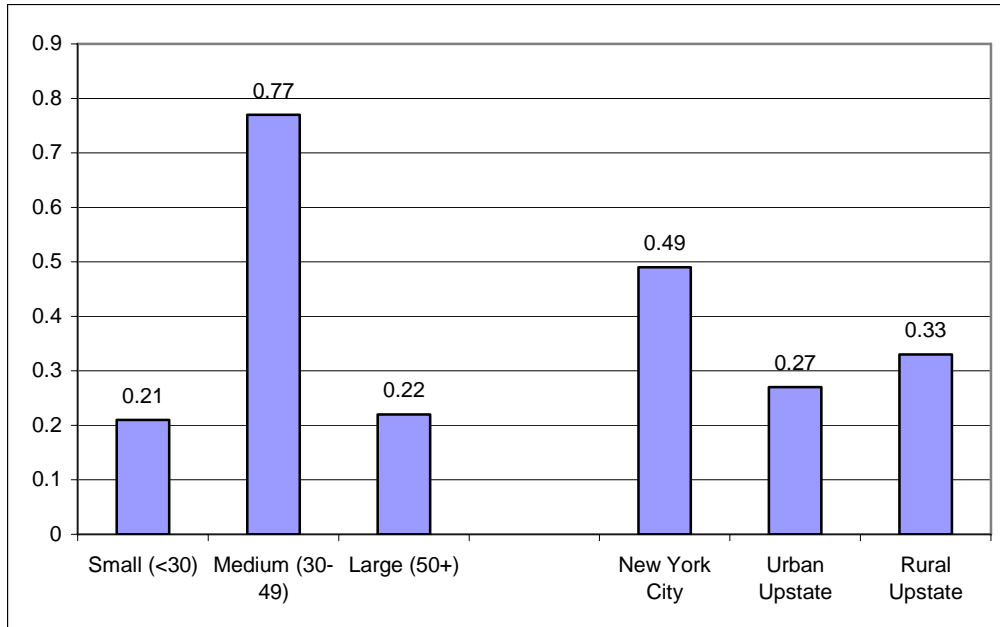
**Figure 17. Average Percentage of Workforce Constituted by Nursing Staff, by CHC Size and Location**



Note: This is the average of the percentages reported by each CHC, not an average of the total workforce across all CHCs.

The ratio of RNs to primary care providers was highest in medium-sized CHCs and New York City CHCs, as shown below in Figure 18.

**Figure 18. Ratio of RNs to Primary Care Providers, by CHC Size and Location**



Note: When presenting a ratio of one job category to a provider category (i.e. multiple jobs) it results in very low ratio numbers, which may be instructive nevertheless

Figure 19 shows the percentage of nursing staff employed by small, medium, and large CHCs by profession. The percentage of nursing staff that was RNs or certified nursing aides did not differ much by CHC size, but small and large CHCs tended to use more medical assistants and fewer LPNs than medium-sized CHCs.

**Figure 19. Distribution of Nursing Staff by Title, by CHC Size**

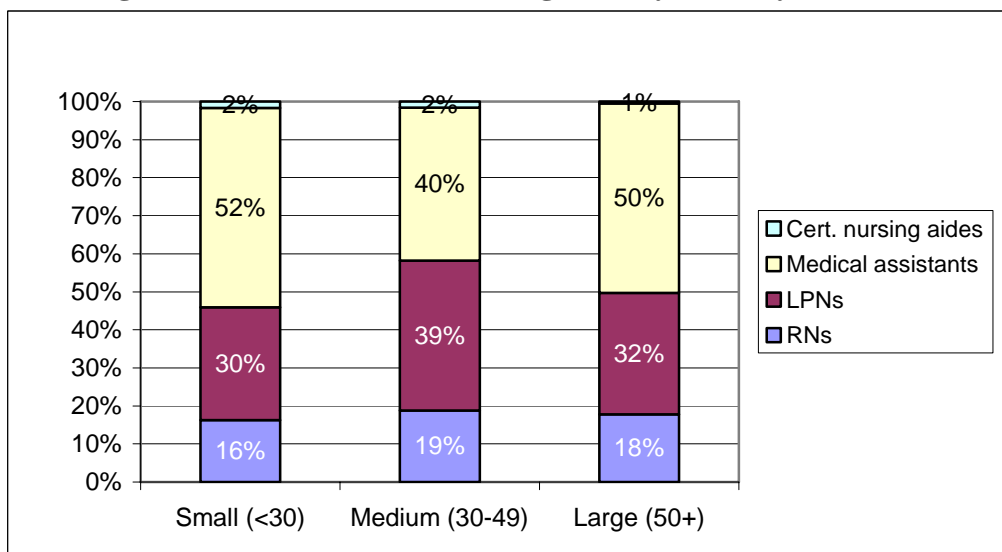
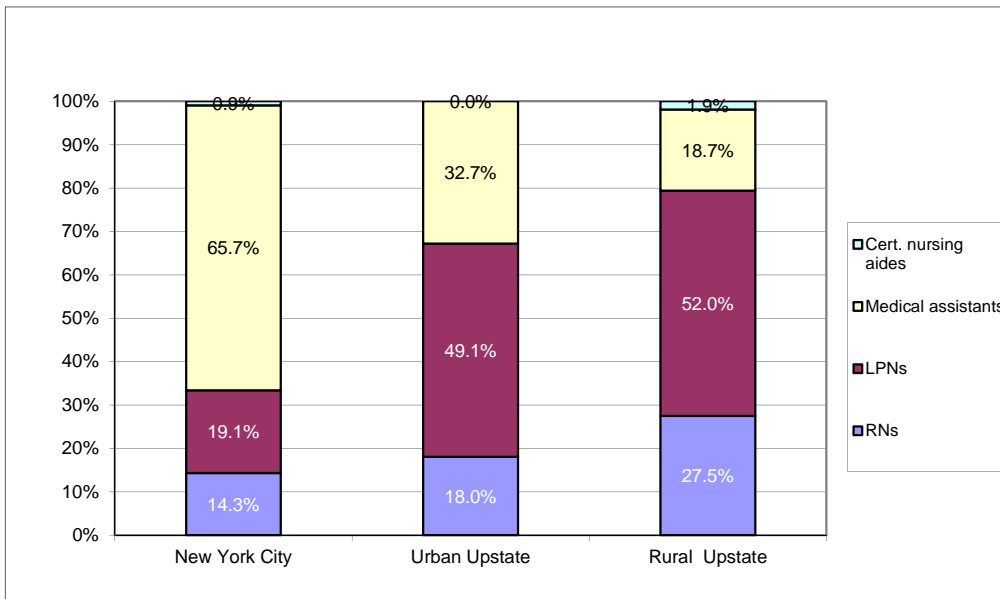


Figure 20 shows the significant differences in the distribution of nursing staff by location. New York City CHCs relied much more heavily on medical assistants and employed fewer LPNs and RNs compared to CHCs upstate where there was a large reliance on LPNs.

**Figure 20. Distribution of Nursing Staff by Title, by Location**



Reported difficulty of recruitment was inversely proportional to professional level, with the most difficult recruitment cited for RNs and the least difficult for medical assistants and certified nursing aides. Retention, however, was reported to be most difficult for LPNs, followed by medical assistants.

**Table 7. Reported Difficulty of Recruitment and Retention of Nursing Staff, in Descending Order of Recruitment Difficulty**

	Recruitment	Retention
RNs	2.65	2.16
LPNs	2.27	2.44
Medical assistants	1.34	2.26
Certified nursing aides	1.33	1.79

Large CHCs had the most difficulty recruiting RNs and LPNs, compared to medium-sized and small CHCs, but large CHCs had the easiest time recruiting medical assistants. Retention varied by provider type, as shown in Table 8.

**Table 8. Reported Recruitment and Retention Difficulty, by CHC Size**

	Recruitment			Retention		
	Small (<30)	Medium (30-49)	Large (50+)	Small (<30)	Medium (30-49)	Large (50+)
RNs	2.38	2.50	2.91	2.00	1.88	2.55
LPNs	2.38	2.18	2.62	2.00	2.20	3.15
Medical assistants	1.63	1.40	1.25	2.25	2.44	2.25
Certified nursing aides	1.50	1.00	2.00	2.50	1.40	1.67

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them.

Table 9 shows that urban upstate CHCs had the most difficulty recruiting RNs, while New York City CHCs had the most difficulty recruiting LPNs. Retention of RNs and LPNs was the least challenging for rural upstate CHCs.

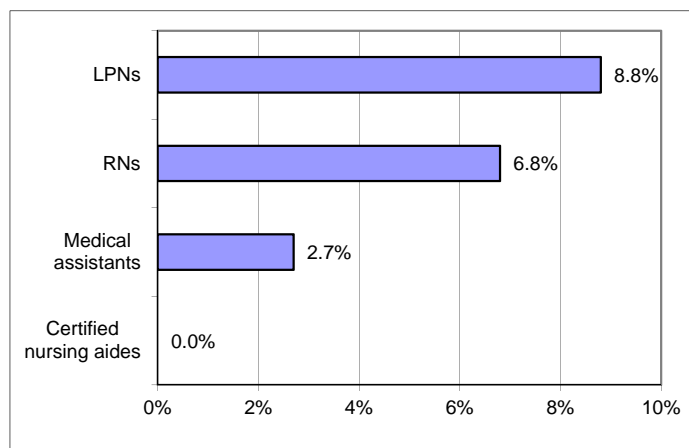
**Table 9. Reported Recruitment and Retention Difficulty, by Location**

	Recruitment			Retention		
	New York City	Urban Upstate	Rural Upstate	New York City	Urban Upstate	Rural Upstate
RNs	2.32	3.44	2.50	2.22	2.25	1.83
LPNs	2.35	2.20	2.14	2.37	2.70	2.29
Medical assistants	1.38	1.22	1.40	2.20	2.44	2.20
Certified nursing aides	1.63	1.00	1.00	1.71	1.40	3.00

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them.

The highest vacancy rates at CHCs were reported for LPNs, followed by RNs. There were no unfilled vacancies for certified nursing aides, reflecting their very limited use in CHCs.

**Figure 21. Vacancy Rates for Nursing Staff, by Title**





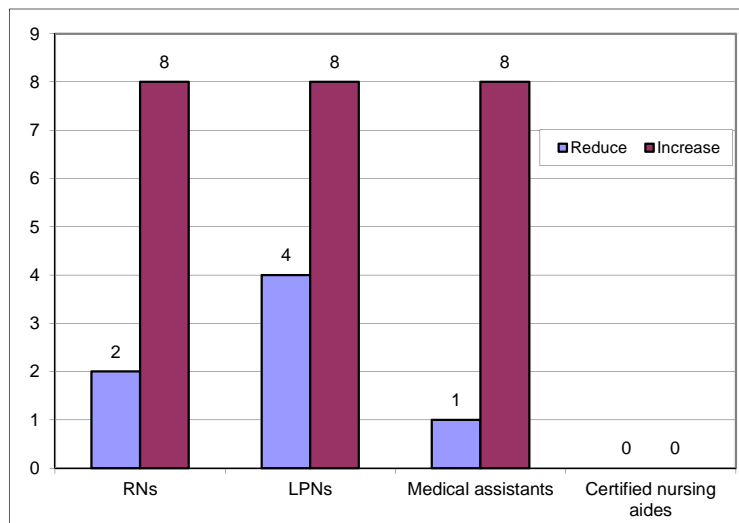
Vacancy rates were highest for RNs in medium-sized and urban upstate CHCs, highest for LPNs in small CHCs and CHCs in New York City and in urban upstate areas, and highest for medical assistants in small and urban upstate CHCs, as shown in Table 10.

**Table 10. Vacancy Rates for Nursing Staff, by CHC Size and Location**

	Size			Location		
	Small (<30)	Medium (30-49)	Large (50+)	New York City	Urban Upstate	Rural Upstate
RNs	9.4%	12.8%	4.8%	1.6%	17.7%	4.3%
LPNs	14.6%	12.2%	6.8%	9.8%	9.7%	6.7%
Medical assistants	8.8%	2.7%	2.1%	2.4%	4.2%	3.2%
Certified nursing aides	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Quite a number of CHCs (eight out of 40, or 20%) planned to increase the number of budgeted positions for RNs, LPNs, and medical assistants; although four CHCs reported plans to reduce the number of budgeted LPN positions (Figure 22). One CHC that did not have RNs on staff planned to add them. One CHC that did not have LPNs on staff planned to add them. And two CHCs that did not have medical assistants on staff planned to add them.

**Figure 22. Number of CHCs Reporting Plans to Reduce or Increase Budgeted Positions, by Occupation, Ordered by Plans to Increase**

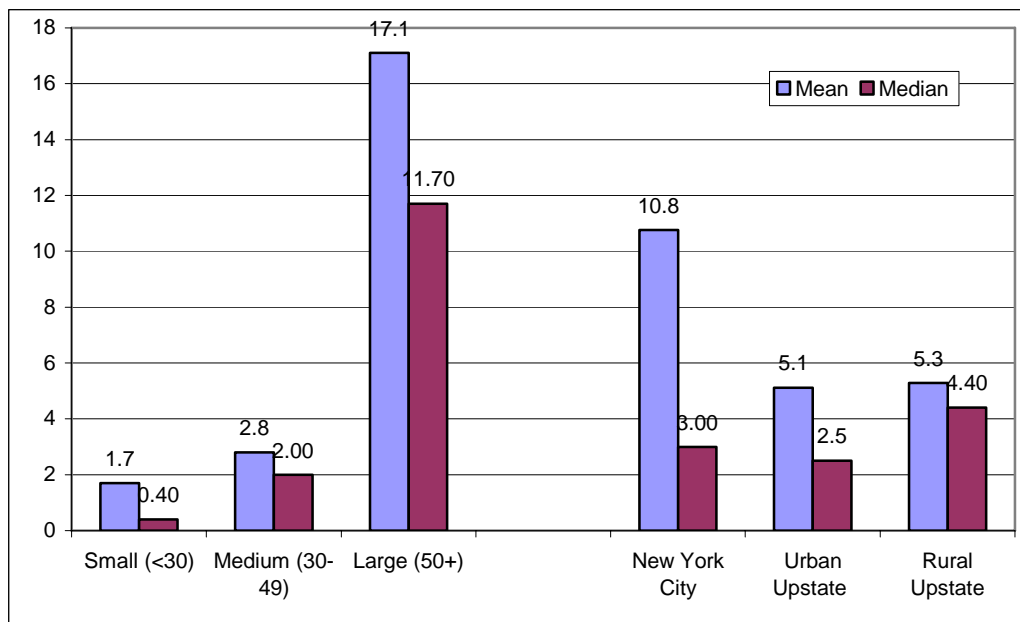


## Behavioral Health Providers

According to the survey, the behavioral health provider category included psychiatrists, psychologists, psychiatric nurse practitioners, social workers, case managers, and substance abuse counselors. Throughout this section, the composition of the behavioral health workforce is compared by CHC size and location.

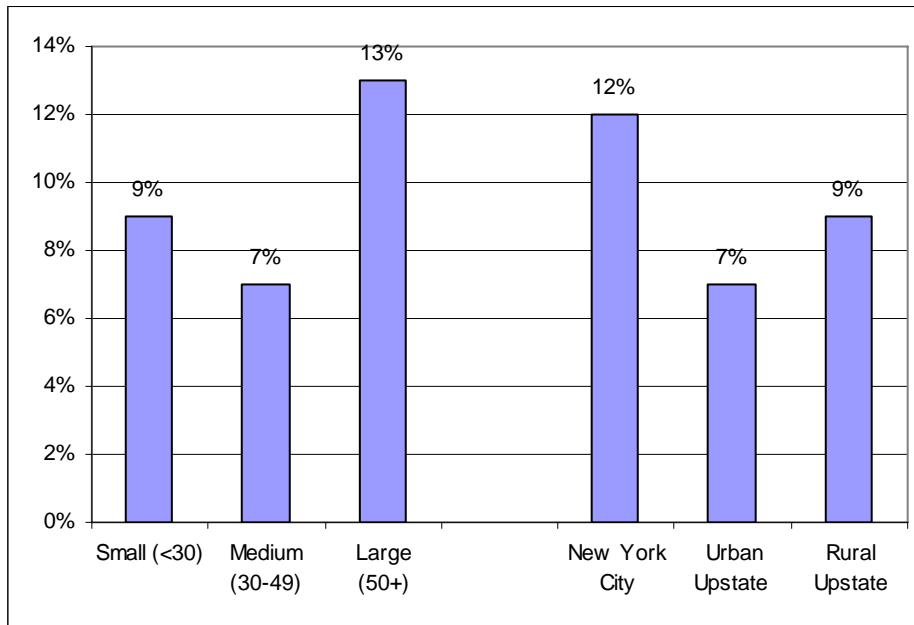
The average number of behavioral health FTEs per CHC varied by CHC size. Small CHCs averaged 1.7 behavioral health FTEs (median = 0.4), while medium-sized CHCs averaged 2.8 (median = 2.0), and large CHCs averaged 17.1 (median = 11.7). There was also variation by CHC location. New York City CHCs averaged 10.8 behavioral health FTEs (median = 3.0), while urban upstate CHCs averaged 5.1 (median = 2.5) and rural upstate CHCs averaged 5.3 (median = 4.4) (Figure 23).

**Figure 23. Mean and Median Number of Behavioral Health Providers per CHC, by Size and Location**



Behavioral health providers constituted, on average, 10% of the health care FTEs in CHCs, although this varied by size. Small CHCs averaged 9% behavioral health providers, while medium-sized CHCs averaged 7% and large CHCs averaged 13%. There was also variation by CHC location. New York City CHCs averaged 12% behavioral health care, while urban upstate CHCs averaged 7% and rural upstate CHCs averaged 9%.

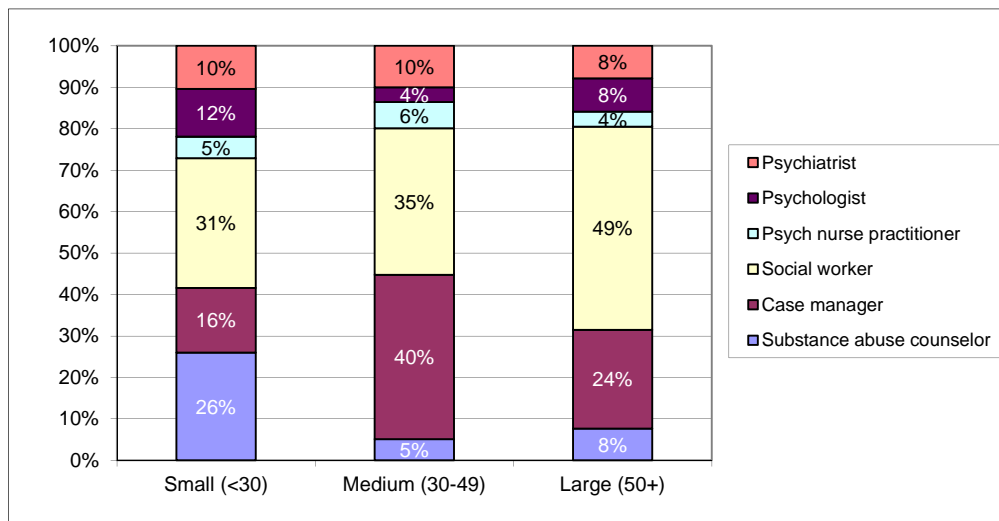
**Figure 24. Average Percentage of Workforce Constituted by Behavioral Health, by CHC Size and Location**



Note: This is the average of the percentages reported by each CHC, not an average of the total workforce across all CHCs.

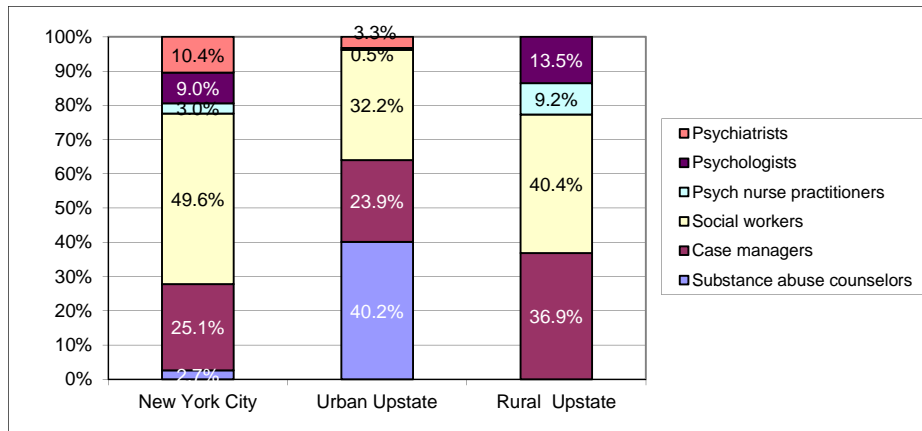
Figure 25 shows the percentage of behavioral health providers employed by small, medium, and large CHCs, by profession. The behavioral health workforce in small CHCs was comprised of a high percentage of substance abuse counselors, while the workforce in medium CHCs relied heavily on case managers, and the workforce in large CHCs consisted of a large percentage of social workers.

**Figure 25. Distribution of Behavioral Health Staff by Title, by CHC Size**



The distribution of behavioral health staff also varied by CHC location (Figure 26). New York City CHCs relied heavily on social workers, who constituted fully half of their behavioral health workers, and another one-quarter were case managers. Similarly, rural upstate CHCs were staffed heavily with social workers and almost as many case managers. Rural upstate CHCs, however, were staffed with more psychologists and psychiatric nurse practitioners and did not employ psychiatrists. Urban upstate CHCs had a behavioral health profile that was heavily skewed to substance abuse counselors, who were over 40% of their behavioral health staff. These CHCs had the fewest higher-level providers (only 3% psychiatrists, no psychologists, and less than 1% psychiatric nurse practitioners).

**Figure 26. Distribution of Behavioral Health Staff by Title, by Location**



Not surprisingly, the most difficult recruitment was reported for psychiatrists, followed by psychiatric nurse practitioners. These two groups were also the most difficult to retain, followed closely by psychologists.

**Table 11. Average Reported Difficulty of Recruitment and Retention of Behavioral Health Providers, in Descending Order by Recruitment Difficulty**

	Recruitment	Retention
Psychiatrists	3.58	2.21
Psychiatric nurse practitioners	3.20	2.21
Social workers	2.80	2.00
Psychologists	2.78	2.19
Substance abuse counselors	2.30	2.00
Case managers	2.04	1.96

The small CHCs almost always reported more difficulty with recruitment and retention of behavioral health providers, while large CHCs reported the least difficulty. The exception to this pattern was case managers, who were easiest to recruit in small CHCs and hardest to recruit in large CHCs (Table 12).

**Table 12. Average Reported Difficulty of Recruitment and Retention, by CHC Size**

	Recruitment			Retention		
	Small (<30)	Medium (30-49)	Large (50+)	Small (<30)	Medium (30-49)	Large (50+)
Psychiatrists	4.33	3.33	3.50	2.80	1.80	2.10
Psychologists	3.75	2.20	2.10	3.75	2.20	1.71
Psychiatric nurse practitioners	3.75	2.80	3.14	3.75	2.80	3.14
Social workers	2.75	2.25	2.82	2.00	1.71	2.00
Case managers	1.67	1.86	2.00	2.17	1.67	1.75
Substance abuse counselors	2.25	2.20	1.89	2.00	1.75	1.75

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

Urban upstate CHCs reported much less difficulty recruiting and retaining behavioral health providers than either New York City or rural upstate CHCs.

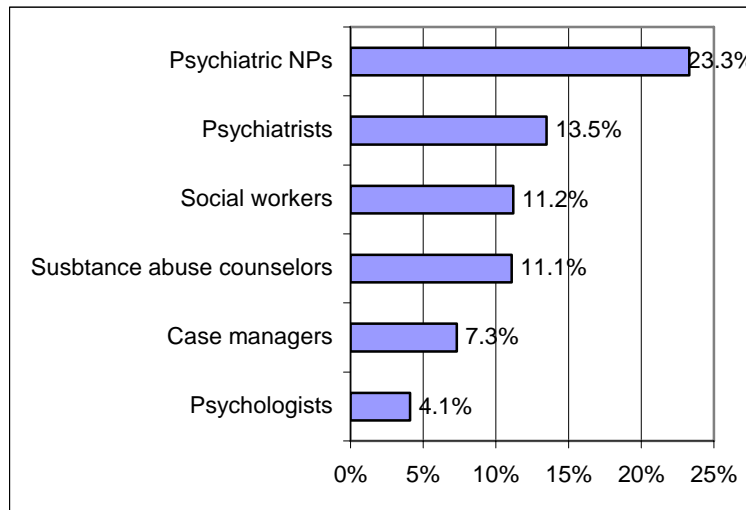
**Table 13. Average Reported Difficulty of Recruitment and Retention, by Location**

	Recruitment			Retention		
	New York City	Urban Upstate	Rural Upstate	New York City	Urban Upstate	Rural Upstate
Psychiatrists	3.75	3.14	3.67	2.50	1.57	2.33
Psychologists	3.25	1.00	2.67	2.40	1.67	2.00
Psychiatric nurse practitioners	3.50	1.75	3.75	2.55	1.50	2.00
Social workers	2.65	2.75	3.40	2.13	1.88	1.80
Case managers	2.07	1.86	2.33	2.15	1.57	2.00
Substance abuse counselors	2.42	1.83	3.00	2.00	1.83	2.50

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

Psychiatric nurse practitioners had the highest vacancy rate of any behavioral health occupation in CHCs. Psychologists and case managers had the lowest (Figure 27).

**Figure 27. Vacancy Rates for Behavioral Health Providers, in Descending Order**



In small CHCs, psychologists were the occupation with the highest vacancy rate, followed by social workers. In medium-sized CHCs, the occupation with the highest vacancy rate was substance abuse counselors, while in large CHCs, it was psychiatric nurse practitioners. The occupation with the highest vacancy rates in New York City CHCs was psychiatric nurse practitioners, while vacancy rates in urban upstate CHCs were higher for psychiatrists than for any other occupation. In rural upstate CHCs, vacancy rates were highest for psychologists.

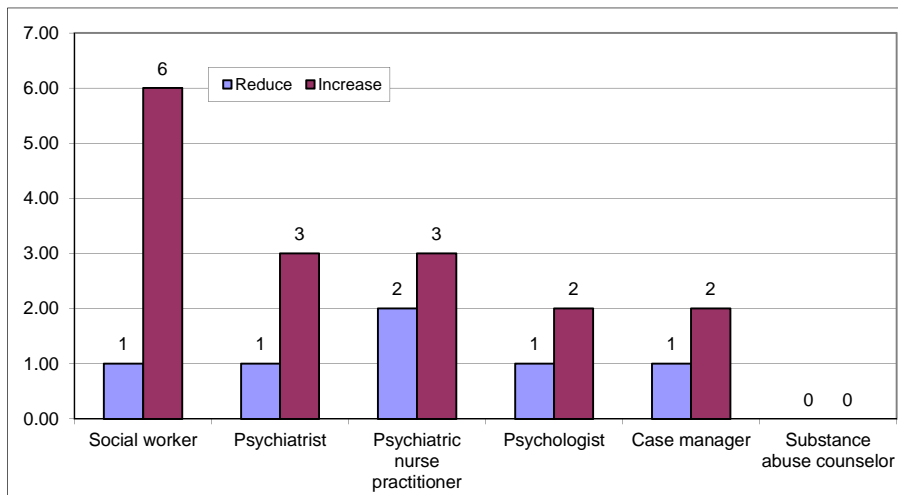
**Table 14. Vacancy Rates by CHC Size and Location**

	Size			Location		
	Small (<30)	Medium (30-49)	Large (50+)	New York City	Urban Upstate	Rural Upstate
Psychiatrists	0.0%	27.0%	12.2%	10.5%	41.2%	N/A
Psychologists	45.5%	0.0%	0.0%	0.0%	N/A	16.7%
Psychiatric nurse practitioners	0.0%	40.8%	21.3%	32.6%	0.0%	0.0%
Social workers	16.7%	33.2%	7.9%	11.3%	19.5%	0.0%
Case managers	0.0%	6.5%	4.9%	8.9%	0.0%	6.8%
Substance abuse counselors	0.0%	50.0%	10.0%	15.4%	9.8%	N/A

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

Six CHCs (15% of those responding) reported they planned to increase the number of budgeted positions for social workers by the end of the year, and two of them did not presently employ social workers. No CHCs reported plans to change the number of their substance abuse counselor positions (Figure 28).

**Figure 28. Number of CHCs Reporting Plans to Increase or Reduce Behavioral Health Positions, in Descending Order of Plans to Increase**

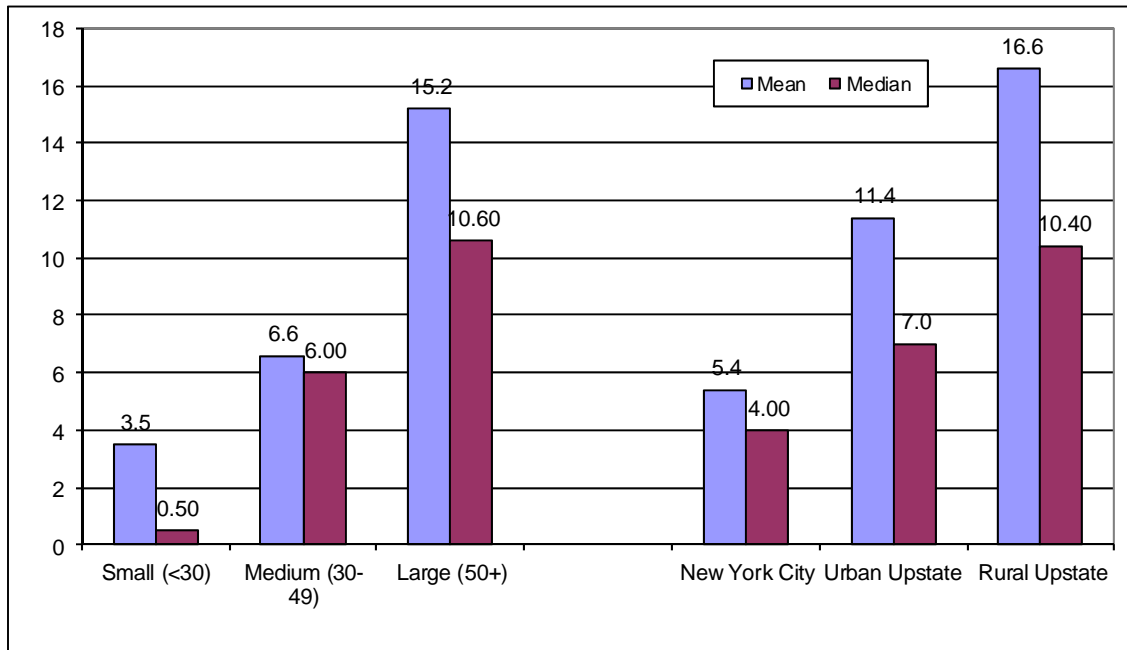


### *Oral Health Providers*

According to the survey, the oral health provider category is comprised of dentists, dental hygienists, and dental assistants/aides/technicians. Throughout this section, the composition of the oral health workforce is compared by CHC size and location.

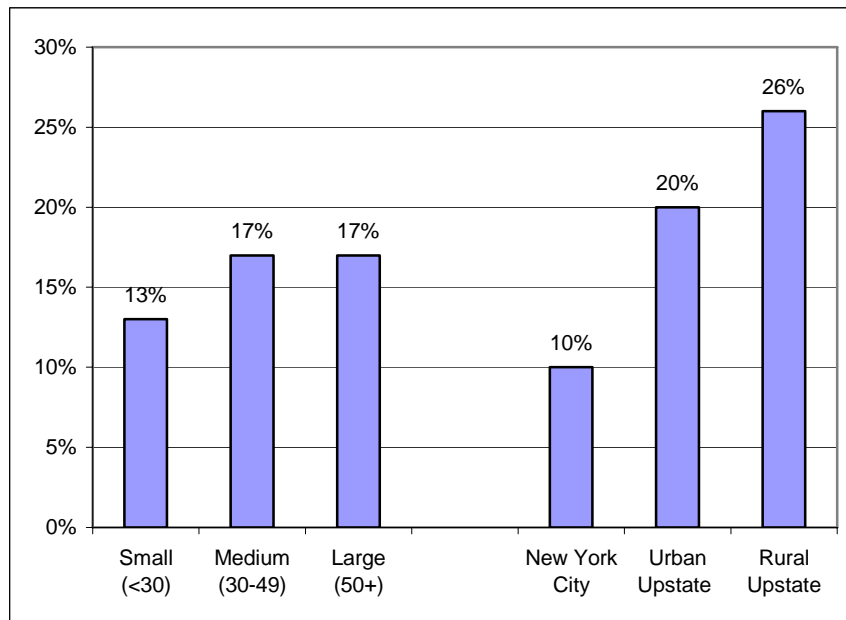
The average number of oral health providers per CHC varied by CHC size. Small CHCs averaged 3.5 oral health providers (median = 0.5), while medium-sized CHCs averaged 6.6 (median = 6.0), and large CHCs averaged 15.2 (median = 10.6). There was also variation by CHC location. New York City CHCs averaged 5.4 oral health FTEs (median = 4.0), while urban upstate CHCs averaged 11.4 (median = 7.0) and rural upstate CHCs averaged 16.6 (median = 10.4) (Figure 29).

**Figure 29. Mean and Median Number of Oral Health Providers per CHC, by Size and Location**



Oral health providers constituted, on average, 16% of the health care staff at CHCs, although this varied by size. Small CHCs averaged 13% oral health providers, while medium-sized CHCs averaged 17% and large CHCs averaged 17%. There was also variation by CHC location. New York City CHCs averaged 10% oral health care, while urban upstate CHCs averaged 20% and rural upstate CHCs averaged 26% (Figure 30).

**Figure 30. Average Percentage of Workforce Constituted by Oral Health, by CHC Size and Location**

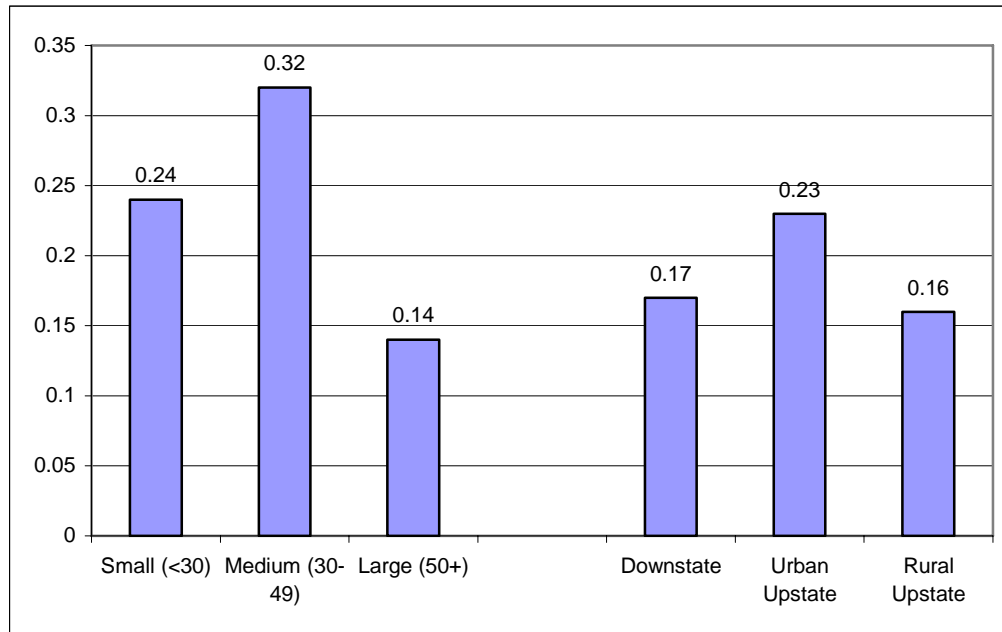


Note: This is the average of the percentages reported by each CHC, not an average of the total workforce across all CHCs.



The ratio of dentists to primary care providers was highest in medium-sized and urban upstate CHCs and lowest in large CHCs, as shown in Figure 31.

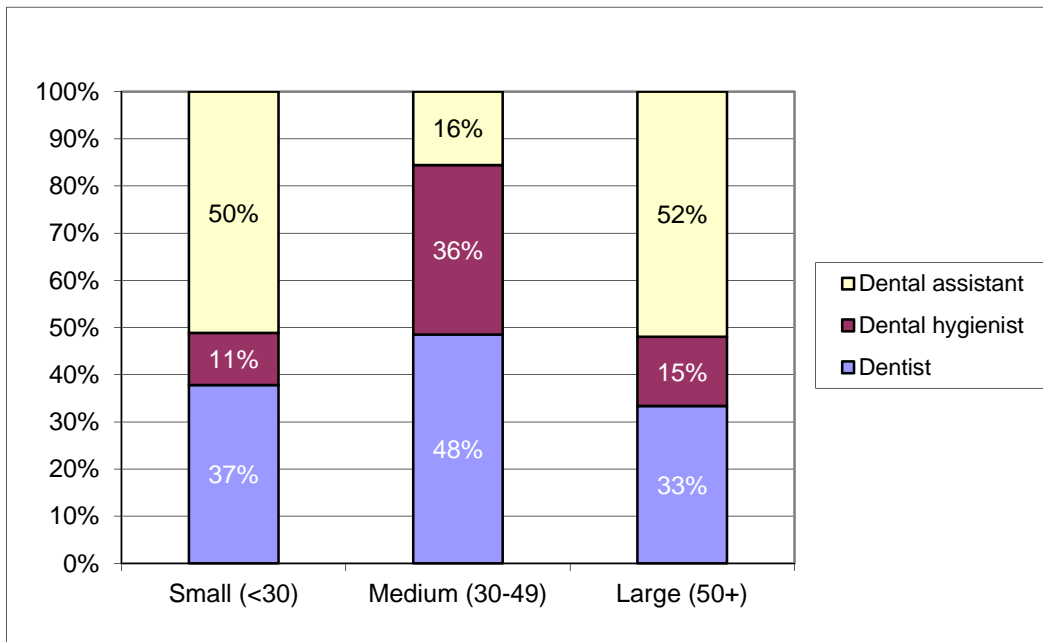
**Figure 31. Ratio of Dentists to Primary Care Providers, by CHC Size and Location**



Note: When presenting a ratio of one job category to a provider category (i.e. multiple jobs) it results in very low ratio numbers, which may be instructive nevertheless

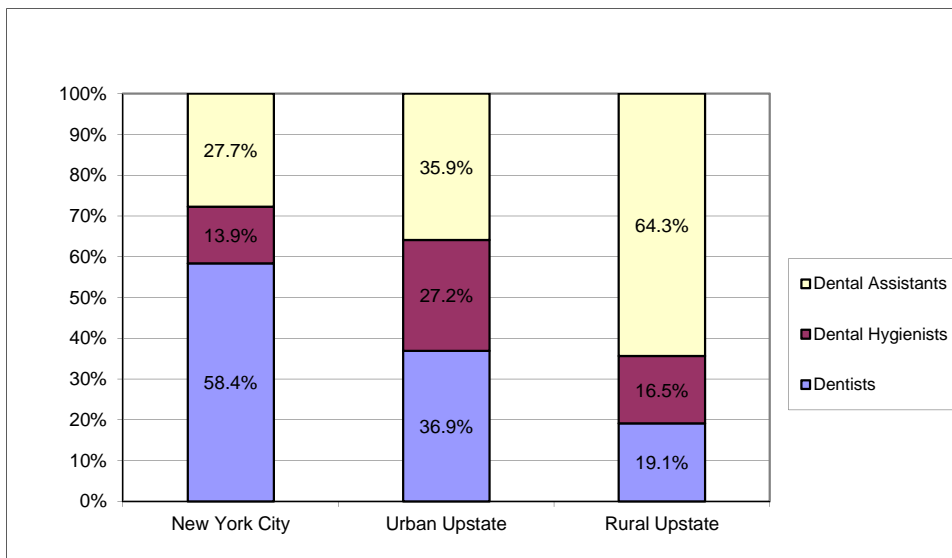
Dental assistants constituted the largest percentage of oral health providers in both small and large CHCs. Dentists and dental hygienists were a larger percentage in medium-sized CHCs (Figure 32).

**Figure 32. Distribution of Oral Health Providers by Title, by CHC Size**



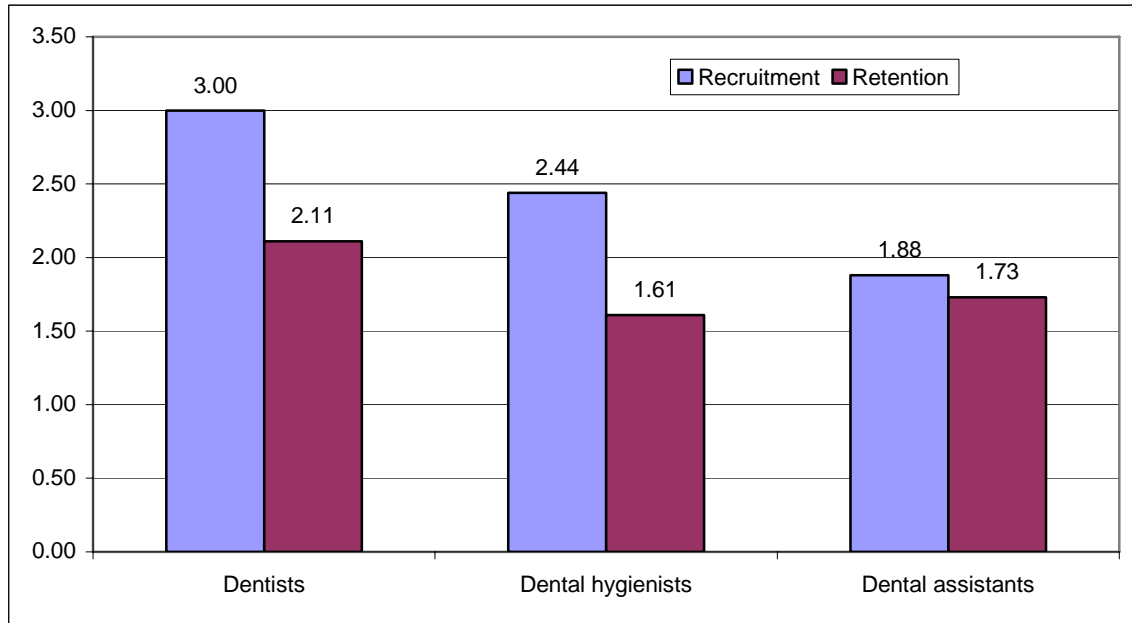
New York City CHCs had the highest proportion of dentists, by far, and the lowest proportion of dental assistants among their oral health providers, followed by urban upstate CHCs. Rural upstate CHCs had the fewest dentists and most dental assistants. Urban upstate CHCs had the most dental hygienists.

**Figure 33. Distribution of Oral Health Providers by Title, by Location**



Not surprisingly, dentists were the most difficult oral health providers for CHCs to recruit and retain. Dental hygienists were more difficult to recruit than dental assistants, but slightly less difficult to retain.

**Figure 34. Average Reported Recruitment and Retention Difficulty of Oral Health Providers, in Descending Order by Recruitment Difficulty**



Dentists were the most difficult to recruit in large CHCs and the least difficult to recruit in small CHCs. Small CHCs also reported the least difficulty retaining dentists. Dental hygienists were more difficult to recruit and retain in small CHCs, however, and easiest to recruit and retain in medium-sized CHCs. This pattern was also true of dental assistant recruitment, but retention of dental assistants was most difficult in large CHCs.

**Table 15. Average Reported Recruitment and Retention Difficulty by CHCs of Oral Health Providers, by CHC Size**

	Recruitment			Retention		
	Small (<30)	Medium (30-49)	Large (50+)	Small (<30)	Medium (30-49)	Large (50+)
Dentists	2.57	2.78	3.43	1.86	2.11	2.07
Dental hygienists	3.00	1.90	2.54	2.00	1.33	1.62
Dental assistants	2.33	1.40	2.08	1.67	1.33	2.00

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

Recruitment of dentists was most difficult for rural upstate CHCs, while recruitment of dental hygienists was most difficult for New York City CHCs and recruitment of dental assistants was most difficult for urban upstate CHCs. Retention of all oral health providers was least difficult in rural upstate CHCs (Figure 35).

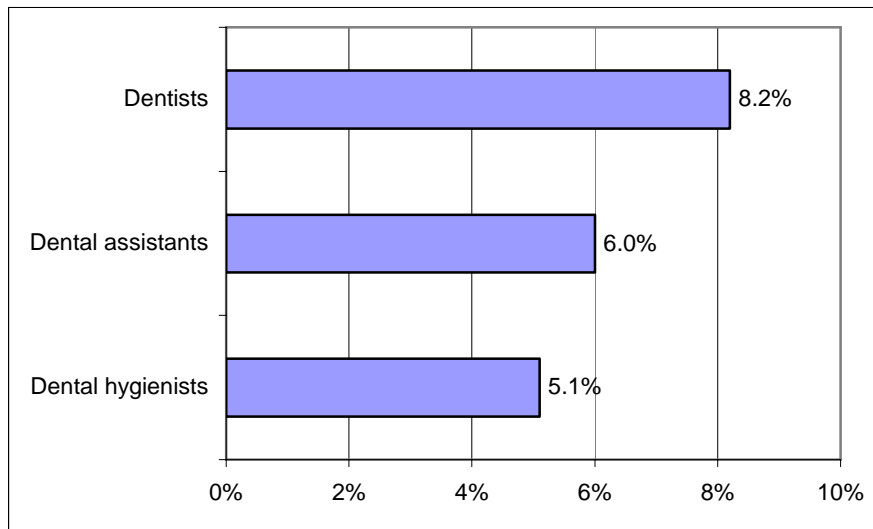
**Table 16. Average Reported Recruitment and Retention Difficulty by CHCs of Oral Health Providers, by Location**

	Recruitment			Retention		
	New York City	Urban Upstate	Rural Upstate	New York City	Urban Upstate	Rural Upstate
Dentists	2.94	3.00	3.14	2.33	2.30	1.29
Dental hygienists	2.76	2.00	2.29	1.81	1.50	1.29
Dental assistants	1.61	2.20	2.17	1.65	2.00	1.50

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

Dentists had the highest vacancy rate at CHCs (8%), followed by dental assistants (6%) and dental hygienists (5%).

**Figure 35. Vacancy Rates at CHCs for Oral Health Providers, in Descending Order**



As seen in Table 17, vacancies for both dental hygienists and dental assistants were much higher in small CHCs than in medium-sized and large CHCs. New York City CHCs reported lower vacancy rates for dentists than for either dental hygienists or dental assistants. In contrast, vacancy rates for dental hygienists in both urban and rural upstate CHCs were low.

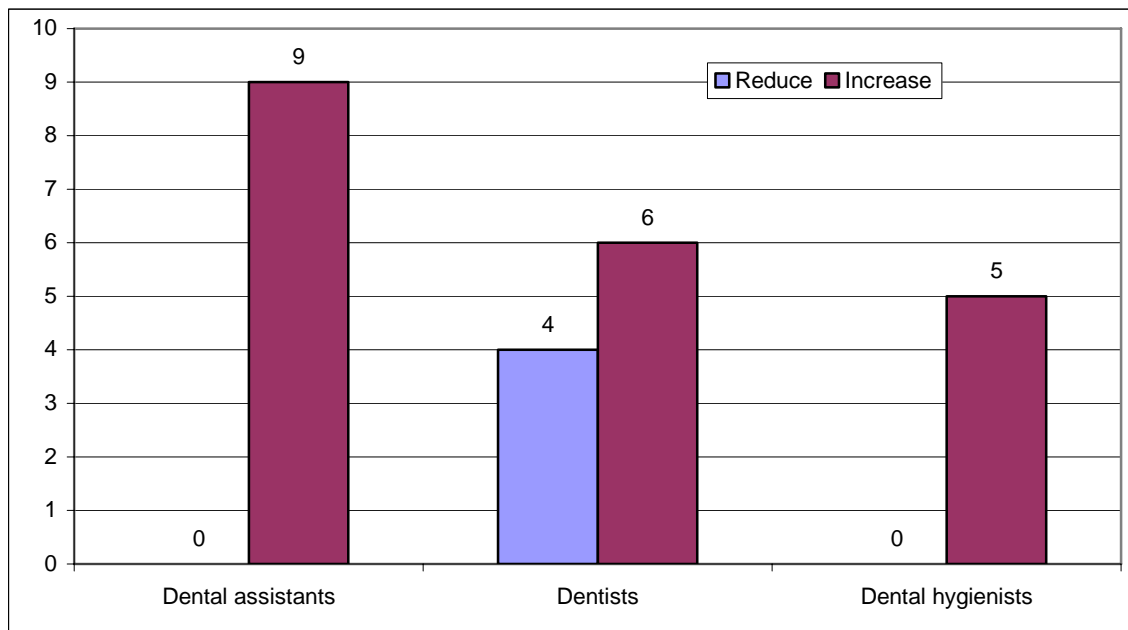
**Table 17. Vacancy Rates for Oral Health Providers by CHC Size and Location**

	Size			Location		
	Small (<30)	Medium (30-49)	Large (50+)	New York City	Urban Upstate	Rural Upstate
Dentists	0%	9.8%	7.8%	4.7%	15.3%	4.3%
Dental hygienists	20.8%	7.2%	3.1%	17.9%	3.5%	0%
Dental assistants	22.1%	0.0%	3.5%	17.6%	7.4%	0%

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

Although a large number of CHCs (six, or 15%) reported plans to increase the number of their dentists, nearly as many (four, or 10%) planned to reduce budgeted positions for dentists. One CHC that did not employ a dentist reported plans to add a position for one. Five CHCs (12.5%) planned to increase positions for dental hygienists, while no CHCs planned to reduce such positions. Nine CHCs (22.5%, or nearly one-quarter) planned to increase positions for dental assistants, and of those, seven did not currently employ dental assistants.

**Figure 36. Number of CHCs Reporting Plans to Increase or Reduce Oral Health Positions, in Descending Order by Plans to Increase**

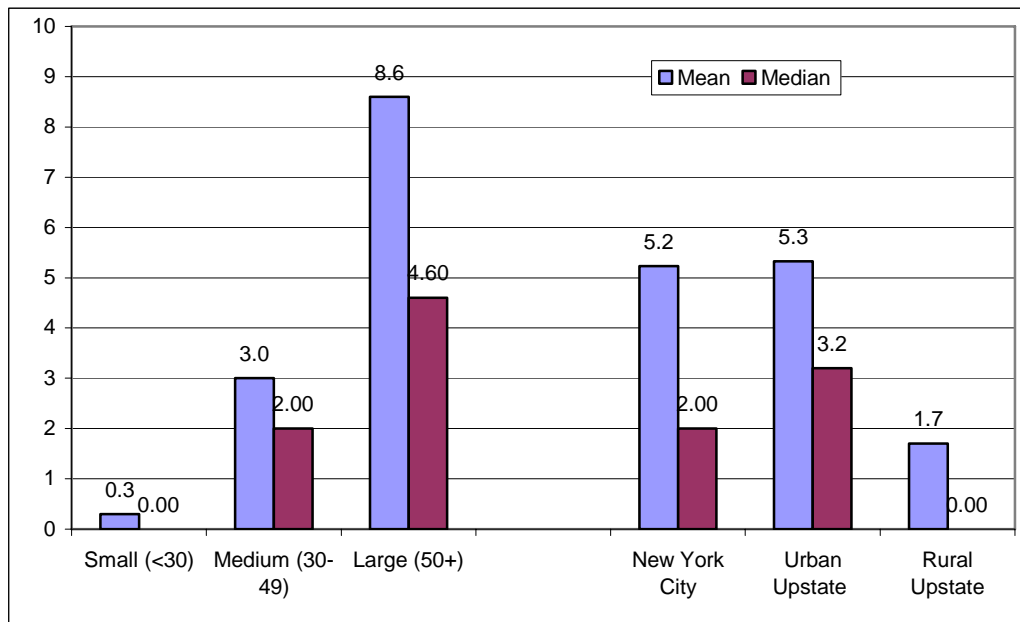


## Ancillary Providers

As per the survey, the ancillary staff category included nutritionists and nutrition educators, health educators, HIV counselors, patient health navigators, and community health workers. Throughout this section, the constitution of the oral health workforce is compared by CHC size and location.

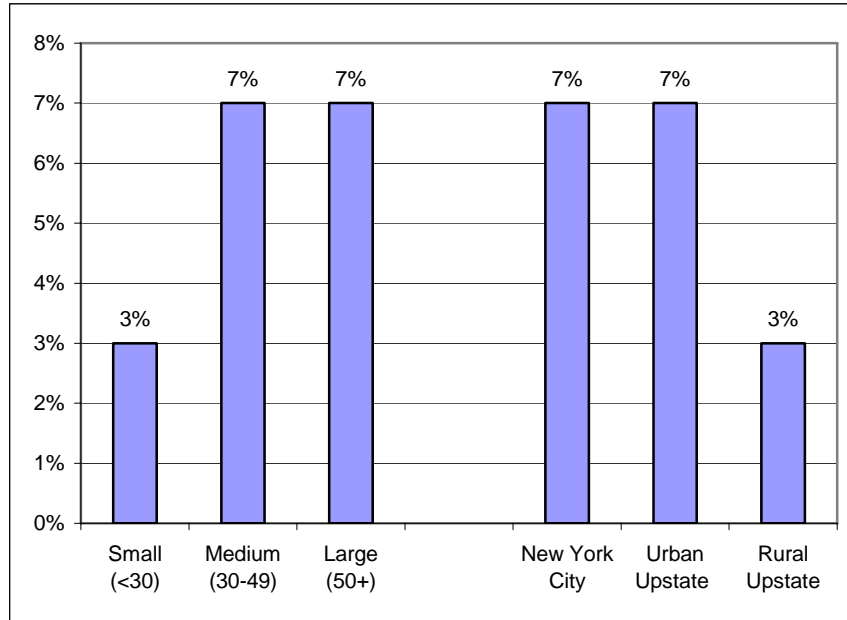
The average number of ancillary providers per CHC varied by CHC size. Small CHCs averaged 0.3 ancillary providers (median = 0), while medium-sized CHCs averaged 3.0 (median = 2.0), and large CHCs averaged 8.6 (median = 4.6). There was also variation by CHC location. New York City CHCs averaged 5.2 ancillary FTEs (median = 2.0), while urban upstate CHCs averaged 5.3 (median = 3.2) and rural upstate CHCs averaged 1.7 (median = 0.0) (Figure 37).

**Figure 37. Mean and Median Number of Ancillary Providers Per CHC, by Size and Location**



Ancillary providers constituted, on average, 6.1% of the health care staff at CHCs, although this varied by size. The smallest CHCs averaged 3% ancillary providers, while medium-sized CHCs averaged 7% and large CHCs averaged 7%. There was also variation by location. New York City CHCs averaged 7% ancillary care, while urban upstate CHCs averaged 7% and rural upstate CHCs averaged 3% (Figure 38).

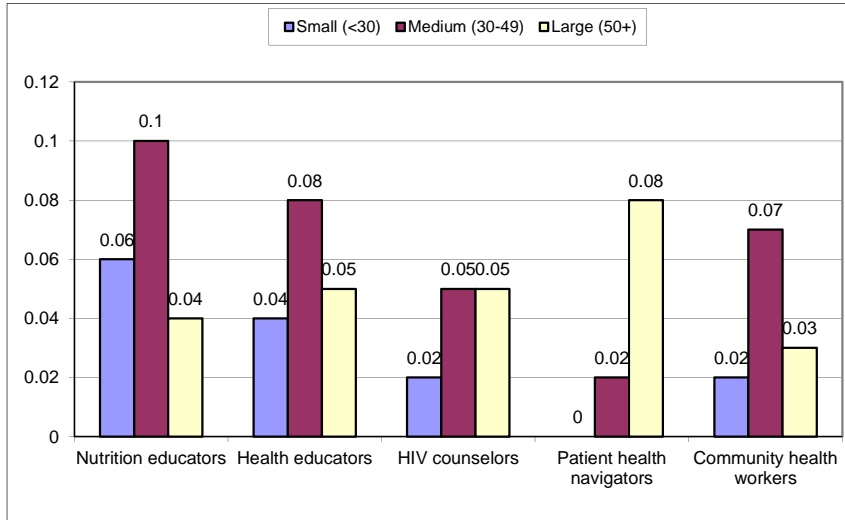
**Figure 38. Average Percentage of Workforce Constituted by Ancillary Care, by CHC Size and Location**



Note: This is the average of the percentages reported by each CHC, not an average of the total workforce across all CHCs.

The ratio of specific ancillary staff to primary care providers by CHC size (Figure 39) was instructive. Medium-sized CHCs had proportionately more of every type of ancillary staff than small or large CHCs, except for HIV counselors (large CHCs had the same ratio as medium-sized ones) and patient health navigators (which appeared to be used almost exclusively by large CHCs). Among both small and medium CHCs, nutritionists/nutrition educators were the most commonly used type of ancillary staff, but in large CHCs patient health navigators were more common than any other ancillary title.

**Figure 39. Ratio of Specific Ancillary Providers to Primary Care Providers, by CHC Size**

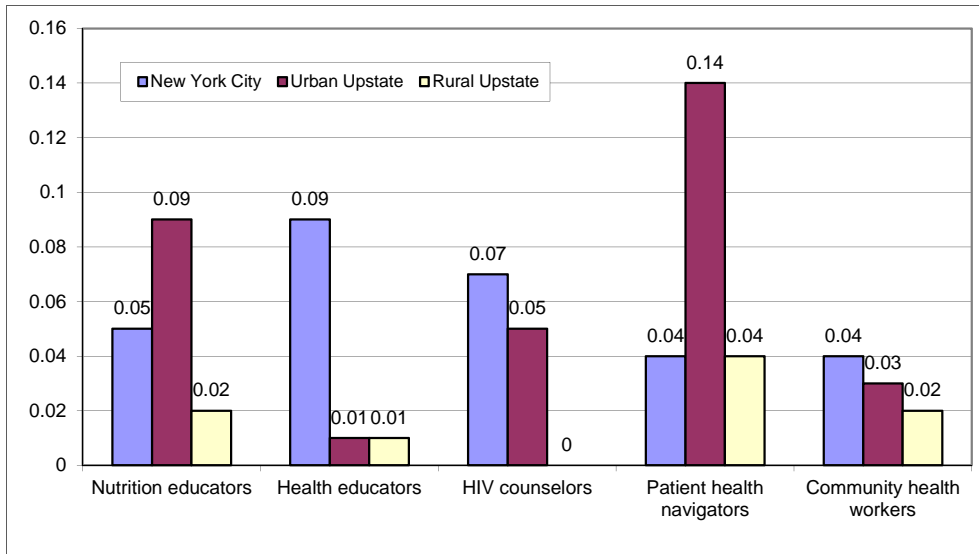


Note: When presenting a ratio of one job category to a provider category (i.e., multiple jobs) it results in very low ratio numbers, which may be instructive nevertheless

The ratio of specific ancillary staff to primary care providers by location was interesting (Figure 40). Nutrition educators were considerably more common in urban upstate CHCs than in either New York City or rural upstate CHCs. In contrast, health educators were almost exclusively used in New York City CHCs, where they were the most common type of ancillary provider. HIV counselors were found in the urban CHCs (both upstate and New York City), but not in rural CHCs. Patient health navigators were overwhelmingly found in urban upstate CHCs. Although patient health navigators were the most common type of ancillary providers in rural upstate CHCs, they were found in much smaller numbers.



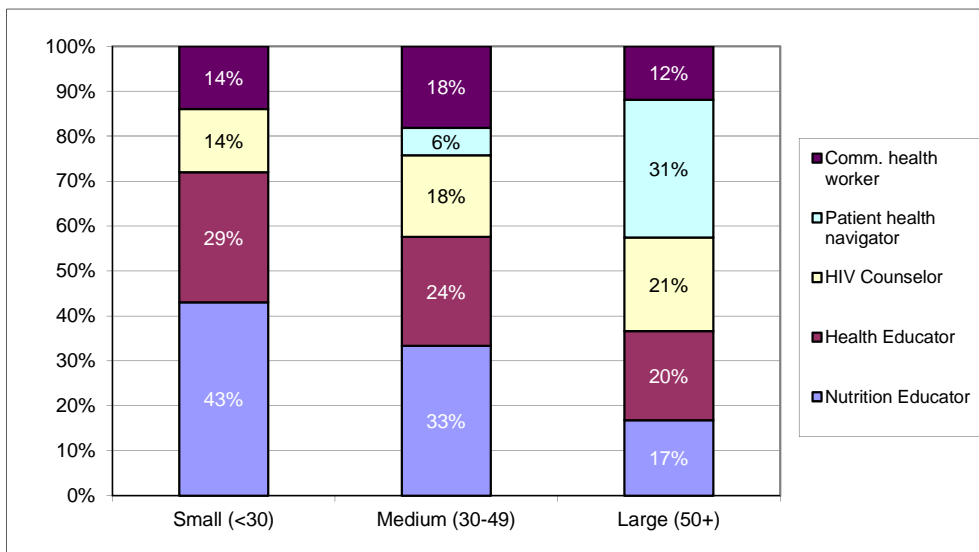
**Figure 40. Ratio of Specific Ancillary Providers to Primary Care Providers, by Location**



Note: When presenting a ratio of one job category to a provider category (i.e. multiple jobs) it results in very low ratio numbers, which may be instructive nevertheless

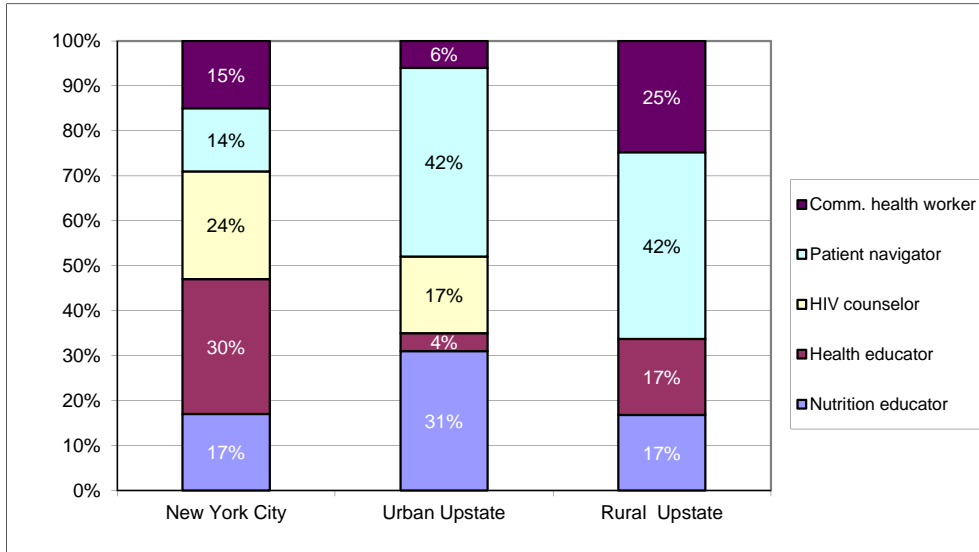
Most of the ancillary providers found in small and medium-sized CHCs were either nutrition educators/nutritionists or health educators. Patient health navigators were a larger percentage of the ancillary workforce in large CHCs (Figure 41).

**Figure 41. Distribution of Ancillary Providers by Title, by CHC Size**



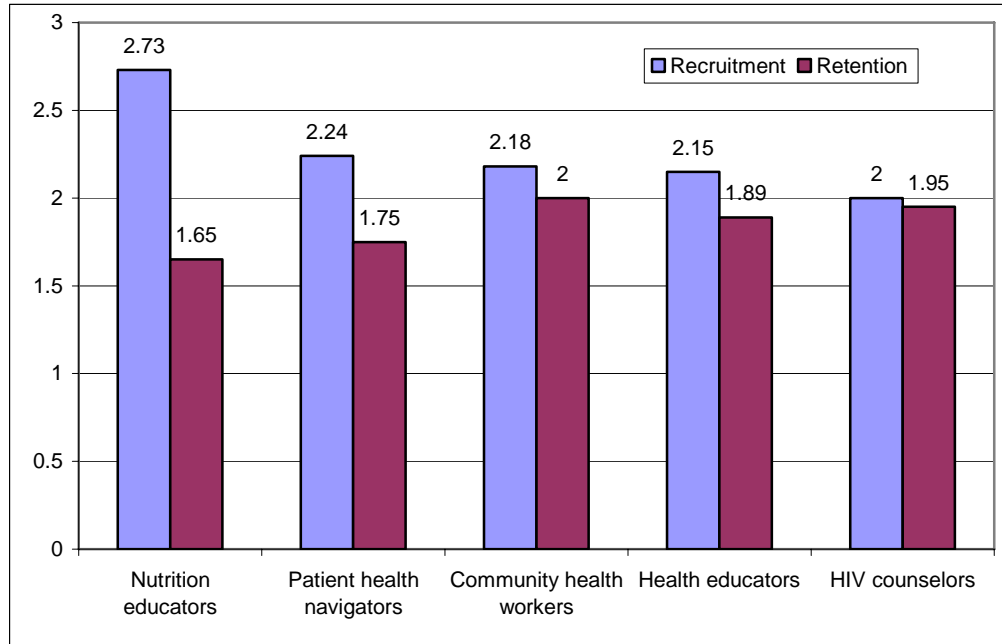
In CHCs in New York City, nearly one-third of ancillary providers were health educators, and nearly one-quarter were HIV counselors. These providers constituted a much smaller percentage of the ancillary workforce in upstate clinics, however. The ancillary workforce in urban upstate clinics was dominated by patient health navigators and nutrition educators/nutritionists, while ancillary providers in rural clinics were most likely to be patient health navigators or community health workers (Figure 42).

**Figure 42. Distribution of Ancillary Providers by Title, by Location**



Nutritionists/nutrition educators were the most difficult ancillary providers to recruit, while community health workers were the most difficult to retain (Figure 41).

**Figure 41. Average Reported Difficulty of Recruitment and Retention of Ancillary Providers, in Descending Order of Recruitment Difficulty**



Note: When presenting a ratio of one job category to a provider category (i.e. multiple jobs) it results in very low ratio numbers, which may be instructive nevertheless

Generally, small CHCs had the most difficult time recruiting ancillary staff (across all job categories), followed by large CHCs. Large CHCs had a slightly more difficult time than small ones recruiting nutrition educators, while medium-sized CHCs had the greatest difficulty recruiting community health workers and nutritionists/nutrition educators. Retention across all ancillary job categories was most difficult in the large CHCs. Small CHCs reported a high degree of difficulty recruiting both health educators and patient health navigators.

**Table 18. Average Reported Difficulty of Recruitment and Retention by CHC Size**

	Recruitment			Retention		
	Small (<30)	Medium (30-49)	Large (50+)	Small (<30)	Medium (30-49)	Large (50+)
Nutritionists/Nutrition educators	2.83	2.33	2.90	1.25	1.00	2.20
Health educators	3.00	1.80	2.00	1.50	1.40	2.38
HIV counselors	2.33	1.71	2.00	1.00	1.33	2.40
Patient health navigators	3.00	1.60	2.13	1.00	1.20	2.00
Community health workers	2.25	2.33	1.89	1.33	1.33	2.33

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

Recruitment of ancillary providers was most difficult in rural upstate CHCs, followed by New York City CHCs. Urban upstate CHCs reported the least difficult recruitment of all ancillary providers. In contrast, New York City CHCs reported the most difficult retention of these providers, followed by urban upstate CHCs. Retention of ancillary providers appeared least difficult in rural upstate CHCs.

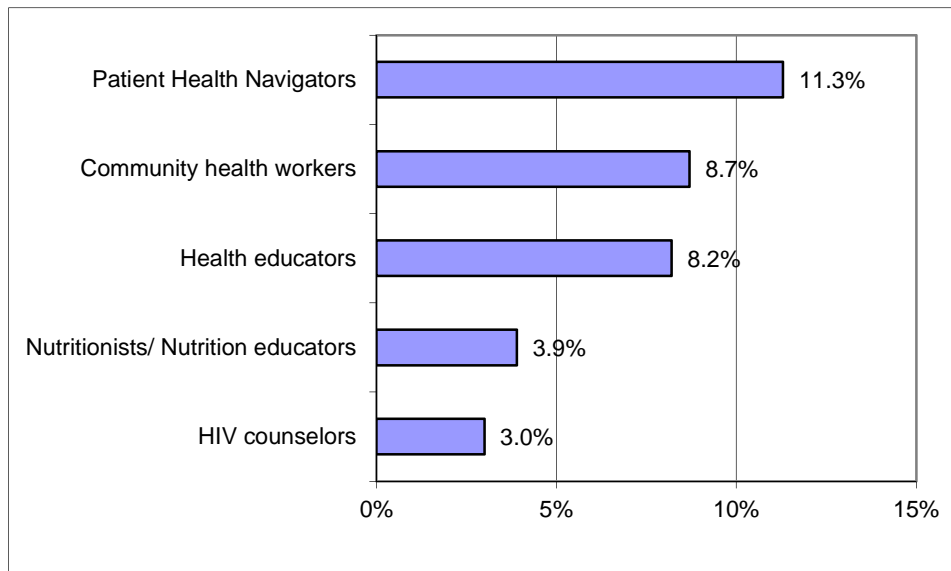
**Table 19. Average Reported Difficulty of Recruitment and Retention by Location**

	Recruitment			Retention		
	New York City	Urban Upstate	Rural Upstate	New York City	Urban Upstate	Rural Upstate
Nutritionists/Nutrition educators	2.81	2.43	3.00	1.79	1.50	1.33
Health educators	2.14	2.00	2.50	2.25	1.25	1.00
HIV counselors	1.92	1.86	2.67	2.23	1.67	1.33
Patient health navigators	2.20	1.67	2.75	2.33	1.00	1.00
Community health workers	2.18	1.75	3.00	2.40	1.50	1.00

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

Although nutritionists/nutrition educators were reported as being relatively difficult to recruit, their vacancy rates were actually low compared to other ancillary providers. Patient health navigators had, by far, the highest vacancy rates, while HIV counselors had the lowest (Figure 42).

**Figure 42. Vacancy Rates for Ancillary Providers, in Descending Order**



Vacancy rates for ancillary providers varied by CHC size and location (Table 20). Small and rural CHCs reported no vacancies for these providers. In contrast, 25% of budgeted community health worker positions were vacant in medium-sized CHCs, and 40% of budgeted community health worker positions were vacant in urban upstate CHCs.

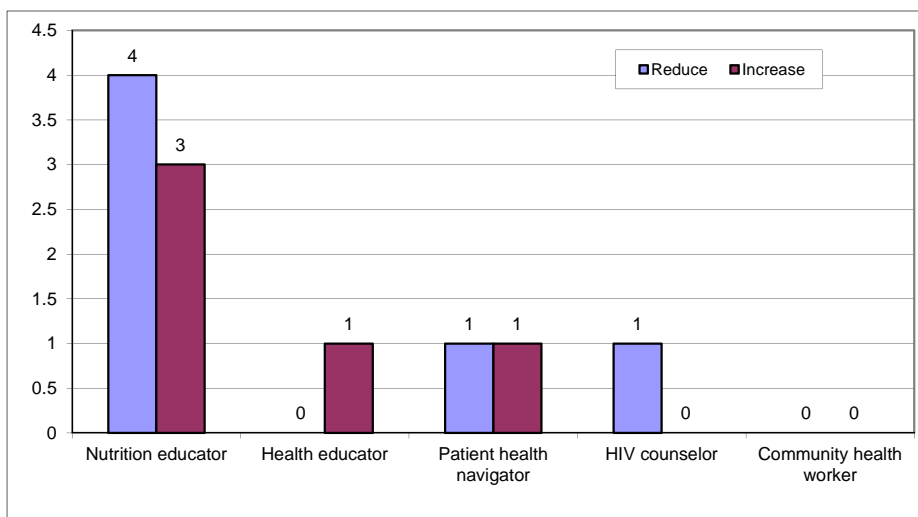
**Table 20. Vacancy Rates for Ancillary Providers by CHC Size and Location**

	Size			Location		
	Small (<30)	Medium (30-49)	Large (50+)	New York City	Urban Upstate	Rural Upstate
Nutrition educators	0%	0%	4.7%	5.6%	0%	0%
Health educators	0%	11.7%	7.7%	9.2%	0%	0%
HIV counselors	0%	0%	3.8%	4.0%	0%	0%
Patient health navigators	0%	0%	9.7%	12.5%	13.0%	0%
Community health workers	0%	25.0%	0%	0%	40.0%	0%

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

Figure 43 shows the number of CHCs that planned to reduce or increase the number of budgeted positions for ancillary staff. Of these, one CHC planned to introduce a position for a nutritionist/nutrition educator, when they did not currently have one, and one CHC planned to introduce a position for a patient health navigator, when they did not presently have one.

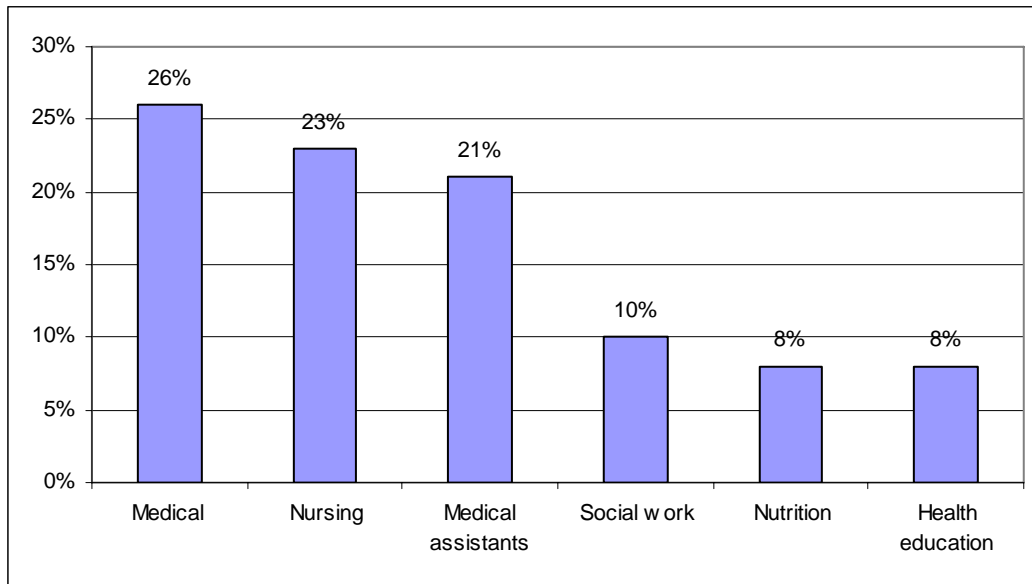
**Figure 43. Number of CHCs Reporting Plans to Increase or Reduce Ancillary Positions, in Descending Order by Plans to Increase**



### Reported Workforce Support Needs

Twenty-six percent of the CHCs reported they would like CHCANYS to offer student internships to medical students to assist the CHCs' recruitment efforts, while 23% reported they would like CHCANYS to offer nursing internships and 21% reported they would like internships for medical assistants (Figure 44).

**Figure 44. Percent of CHCs That Wanted CHCANYS to Offer Student Internships, by Field, in Descending Order**



Demand for student internships was generally highest in large CHCs, followed by small ones, and least in medium-sized CHCs. The exceptions were internships for health educators and medical assistants.

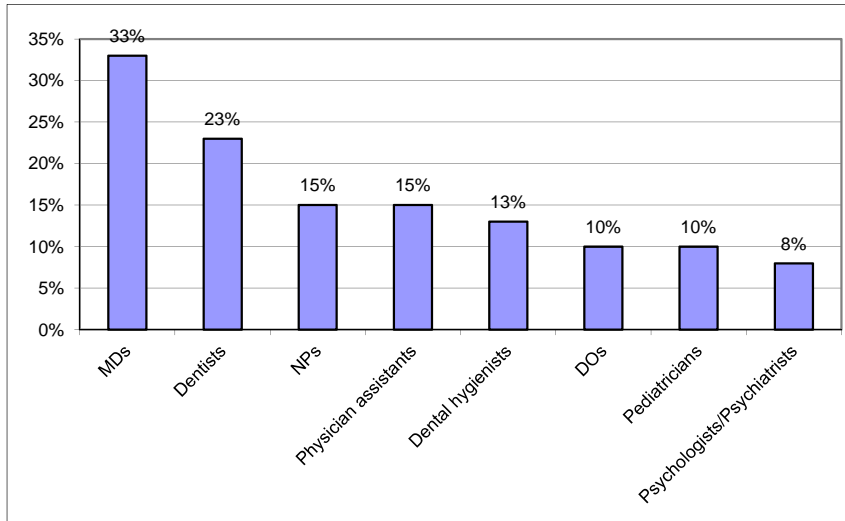
**Table 21. Percent of CHCs That Would Like CHCANYS to Offer Student Internships, by Size and Location**

	Size			Location		
	Small (<30)	Medium (30-49)	Large (50+)	New York City	Urban Upstate	Rural Upstate
Medical	30%	18%	36%	32%	20%	29%
Social work	10%	0%	21%	9%	10%	29%
Nursing	20%	18%	36%	23%	30%	29%
Nutrition	0%	0%	21%	0%	10%	29%
Health educators	22%	0%	7%	10%	0%	14%
Medical assistants	11%	18%	29%	24%	20%	14%

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

One-third of CHCs reported they would like SEARCH/clinical rotations for MDs and 23% reported they would like SEARCH/clinical rotations offered for dentists.

**Figure 45. Percent of CHCs That Would Like SEARCH/clinical Rotations, by Field, in Descending Order**



Compared to small and medium-sized CHCs, large CHCs were most likely to say they would like SEARCH/clinical rotations for MDs, DOs, and dental hygienists. Small CHCs were more likely than others to want SEARCH/clinical rotations for nurse practitioners, pediatricians, and psychologists/psychiatrists. The most desired rotations for small CHCs were nurse practitioners, MDs, physician assistants, and dentists, while the most desired rotations for medium-sized CHCs were dentists and MDs. Large CHCs were most likely to want rotations for MDs, DOs, and dentists.

Rural upstate CHCs did not report interest in SEARCH/clinical rotations for any providers except nurse practitioners, MDs, and DOs; rotations for nurse practitioners were, in contrast, not desired by many urban upstate or New York City CHCs. The most desired rotations for both New York City and urban upstate CHCs were MDs and dentists.

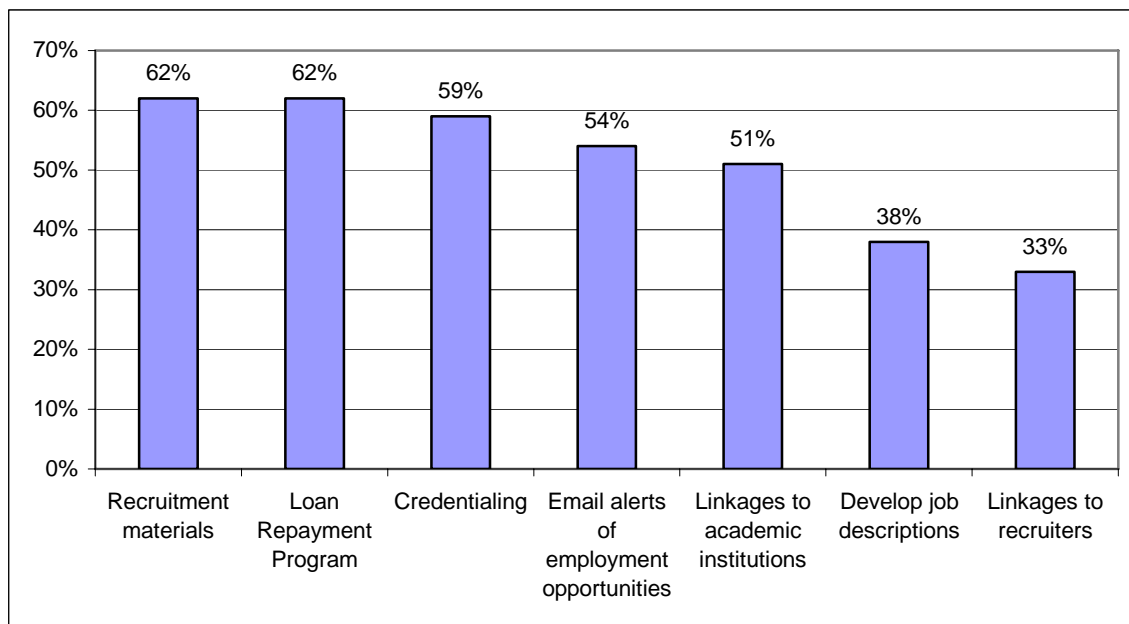
**Table 22. Percent of CHCs That Would Like SEARCH/clinical Rotations, by Size and Location**

	Size			Location		
	Small (<30)	Medium (30-49)	Large (50+)	New York City	Urban Upstate	Rural Upstate
MDs	33%	18%	43%	38%	30%	29%
DO	0%	0%	21%	5%	10%	29%
Nurse practitioners	44%	0%	7%	14%	0%	43%
Physician assistants	33%	9%	7%	24%	10%	0%
Dentists	20%	27%	21%	32%	30%	0%
Dental hygienist	11%	9%	14%	14%	20%	0%
Pediatricians	11%	9%	7%	14%	10%	0%
Psychologists/Psychiatrists	10%	9%	0%	18%	0%	0%

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

Over half of the CHCs surveyed indicated they would like CHCANYS to offer support with recruitment efforts in the form of: recruitment materials, a loan repayment program, credentialing, e-mail alerts of employment opportunities, and linkages to academic institutions. The development of job descriptions and linkages to recruiters were less popular, but still desired by one-third or more of CHCs (Figure 46).

**Figure 46. Percent of CHCs That Would Like CHCANYS to Offer Specific Recruitment Supports, in Descending Order**





Small CHCs most wanted linkages to academic institutions, while medium-sized CHCs most wanted recruitment materials and credentialing. Large CHCs most wanted loan repayment programs. New York City CHCs placed the highest priority on recruitment materials, while urban upstate CHCs most often indicated recruitment materials and credentialing. Rural upstate CHCs were most likely to cite loan repayment programs, credentialing, and linkages to academic institutions.

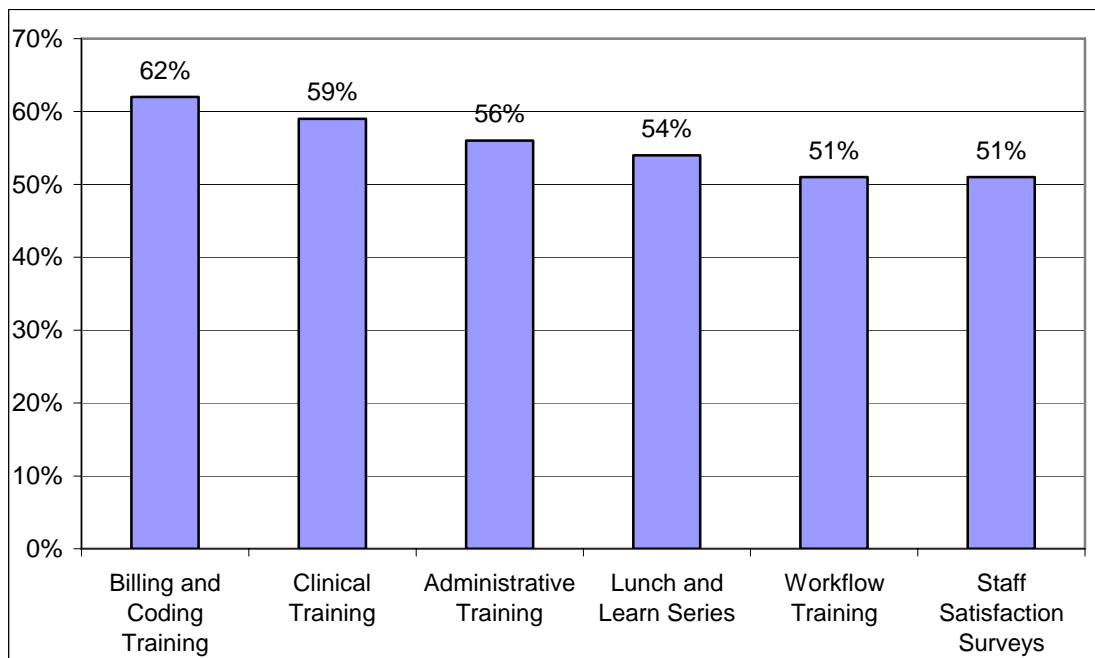
**Table 23. Percent of CHCs That Would Like Specific Recruitment Supports, by Size and Location**

	Size			Location		
	Small (<30)	Medium (30-49)	Large (50+)	New York City	Urban Upstate	Rural Upstate
Recruitment materials	50%	82%	50%	64%	80%	43%
Loan Repayment Programs	50%	55%	79%	55%	70%	86%
Credentialing	44%	73%	57%	48%	80%	71%
Linkages to recruiters	44%	27%	29%	38%	30%	29%
Linkages to academic institutions	80%	36%	57%	50%	50%	71%
Develop job descriptions	30%	55%	36%	41%	50%	29%
Receive e-mail alerts of employment opportunities for clinicians and administrative staff	44%	64%	57%	48%	50%	86%

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

All retention supports cited in the survey were desired by at least half of the CHCs. As shown in Figure 47, billing and coding training were desired by the highest percentage of CHCs.

**Figure 47. Percent of CHCs That Would Like CHCANYS to Offer Specific Retention Supports, in Descending Order**



The retention support most desired by small CHCs was administrative training (56%), followed by billing and coding training (50%). Medium CHCs most often cited a desire for clinical training, administrative training, billing and coding training, and workflow training (all 64%). Large CHCs showed the most interest in billing and coding training and a lunch and learn series (both 71%). Some differences by location were also evident, as shown in Table 24.

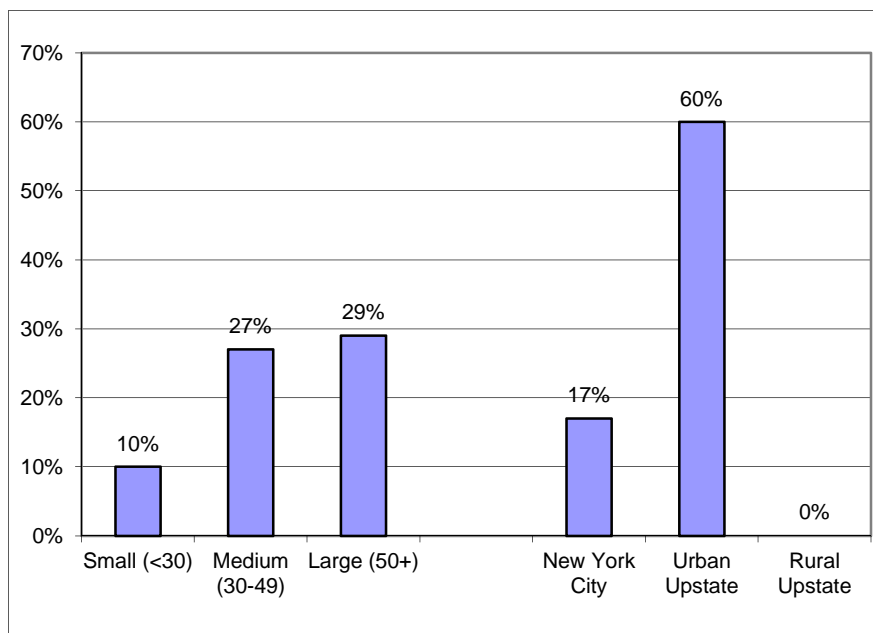
**Table 24. Percent of CHCs That Would Like Specific Retention Supports, by Size and Location**

	Size			Location		
	Small (<30)	Medium (30-49)	Large (50+)	New York City	Urban Upstate	Rural Upstate
Clinical Training	44%	64%	64%	57%	70%	57%
Administrative Training	56%	64%	57%	57%	80%	29%
Billing and Coding Training	50%	64%	71%	55%	80%	71%
Workflow Training	40%	64%	57%	50%	80%	29%
Staff Satisfaction Surveys	44%	45%	57%	48%	60%	57%
Lunch and Learn Series	44%	45%	71%	48%	70%	57%

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

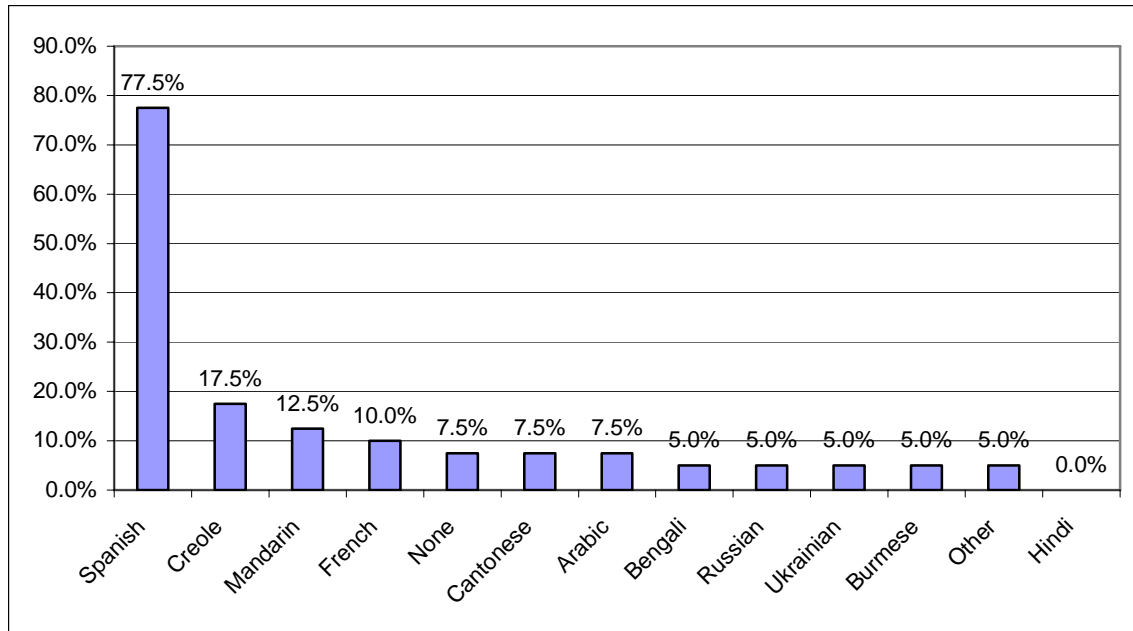
Slightly over one-quarter (26%) of CHCs were interested in hosting an administrative mentorship training program for students, while more than 60% were not. The remaining 13% did not respond. Among CHCs indicating interest, it varied markedly by CHC size and location as shown in Figure 48.

**Figure 48. Percent of CHCs Interested in Hosting an Administrative Mentorship Training Program for Students, by Size and Location**



By far, the most common language CHCs reported they needed in their health centers was Spanish (78%). Creole, Mandarin, and French were also cited by at least 10% of CHCs. A few CHCs reported no language needs, but one of these indicated that they used a telephone interpretation service. A number of CHCs reported language needs not included in the survey; most commonly, Arabic, Russian, Ukrainian, and Burmese. Five percent of CHCs reported other language needs (Yiddish, Hebrew, Karen, Somali, and Vietnamese).<sup>14</sup>

**Figure 49. Languages Other Than English Needed to Provide Culturally Competent Care, in Descending Order**



<sup>14</sup> Only three CHCs did not indicate a response to any of the language questions, and two of them were small CHCs that may not have had any other language needs but neglected to mark “none.” (Both of these small CHCs answered the questions immediately before and after the language questions.)

Not surprisingly, language needs varied by CHC size and location. Among all sizes and locations the top language need was Spanish, but among small and large CHCs, Creole was the second most needed language, by 20% and 21%, respectively. In medium CHCs, however, Spanish was followed by Mandarin, Cantonese, Arabic, and Burmese (all 18%). In New York City CHCs, French was the second most often cited language need (29%), while in urban upstate CHCs Spanish was followed by Arabic and Burmese (both 20%), and in rural upstate Spanish was followed by Creole (14%).

**Table 25. Languages Other Than English Needed to Provide Culturally Competent Care, by Size and Location**

	Size			Location		
	Small (<30)	Medium (30-49)	Large (50+)	New York City	Urban Upstate	Rural Upstate
Spanish	50%	91%	86%	83%	100%	43%
Creole	20%	9%	21%	22%	10%	14%
Mandarin	10%	18%	14%	17%	10%	0%
French	10%	0%	7%	29%	0%	0%
None	20%	9%	7%	4%	0%	43%
Cantonese	0%	18%	7%	9%	10%	0%
Arabic	0%	18%	7%	4%	20%	0%
Bengali	0%	0%	7%	9%	0%	0%
Russian	0%	0%	7%	4%	4%	0%
Ukrainian	0%	0%	7%	0%	10%	7%
Burmese	0%	18%	0%	0%	20%	0%

Note: Job categories are presented in the order in which they appeared in the survey rather than arbitrarily choosing values in one of the six columns to order them

## **CONCLUSIONS**

Community health centers are key to the success of many health reform initiatives. It is critical to understand the size and composition of the workforce of CHCs and their recruitment and retention issues in order to assure their success at their mission of providing cost-effective quality care to underserved populations.

One vital finding of this report was the broad variability of workforce issues amongst CHCs of different sizes and geographic locations. Clearly, a one-size-fits-all approach is not appropriate for workforce policy as it relates to the needs of CHCs in New York.

Given the importance of CHCs to the health care system in New York and to the success of health reform overall, this workforce merits regular, systematic monitoring. This will help ensure the availability of adequate and current information about CHC workforce needs to policymakers and other stakeholders throughout the state.