

www.nyc.gov/ceo

CEO Strategy Update: Nursing Career Ladder August 2012

In 2007 the Center for Economic Opportunity (CEO) and the Health and Hospitals Corporation (HHC) began an ambitious program with two high-impact goals: train low-income New Yorkers for positions starting at \$40,000 and \$65,000 per year, respectively, and fill the labor market need for Licensed Practical Nurses (LPN) and Registered Nurses (RN) in New York City.

CEO evaluates and monitors all its programs to determine effectiveness and documents lessons for the field. Since the two programs were launched and intermediate evaluations completed, CEO and its partners have changed both program models to reflect lessons learned and changes in the labor market for nurses. Such flexibility has been valuable as our understanding of how to make the programs more effective has evolved.

Nursing degrees are an appealing anti-poverty strategy. The programs are truly transformative, with students moving from incomes below 130 percent of the federal poverty line to moderate incomes in highgrowth fields. RNs have the highest number (4,970) of projected annual job openings from 2008-2018 among top occupations in New York. Licensed Practical and Licensed Vocational Nurses have the 7th highest (2,090). ¹

Since 2007, the CEO Nursing Career Ladder program has graduated 192 LPNs and 27 RNs. LPNs are trained by the NYC Department of Education's Office of Adult and Continuing Education (DOE) and RNs are trained by Long Island University (LIU). Both program models were designed with the understanding that HHC would hire all successful graduates. LPNs would commit to working for two years at an HHC hospital and RNs would commit to four.

However, since then hiring for LPNs has slowed and program completion for RNs has proved difficult. HHC reduced hiring for LPNs when it restructured Coler-Goldwater Hospital, where most of the early graduates were placed. In response, program staff have been helping graduates seek positions outside of HHC, but throughout New York City the demand for LPNs has dropped so sharply that less than half of CEO's recent graduates have found employment as full-time LPNs. (See Chart 1 on the next page for the decline of placement rates by cohort.) This recent change makes it difficult to justify the expenditure and is unproductive for participants who work so hard and sacrifice so much to complete the certification. And while the early RN graduates have been hired as RNs at HHC, low retention through the four-year program results in a high cost-per-completer.

In addition, employers at public and private facilities increasingly prefer to hire nurses with experience and specialized certifications, and new graduates for both tracks are becoming more difficult to place in jobs.²

CEO and HHC have responded to these developments with mid-course adjustments to the models. To

¹ U.S. Department of Labor Employment and Training Administration. <u>www.careerinfonet.org</u>

² The program's recent rates of job placements are in line with the experience of the CEO Health Care Sector Center with the Department of Small Business Services, which has also found high overall demand for RNs and LPNs but low placement rates for new graduates.

address the low placement rate for LPNs, HHC developed a pilot program for graduates to work as residents at its hospitals. In this program CEO supports LPN graduates that have not been placed in jobs through a six-week orientation at two hospitals. Upon completion of the orientation, they become part-time employees of the hospital and work hours that would otherwise be covered by LPNs earning overtime. This helps new graduates gain work experience and reduces overtime costs for HHC. The chart below shows that the residency program has employed 40 percent (33 of 79) of 2010 and 2011 graduates while only 40 percent (24 of 79) have gained employment as full-time LPNs.

Chart 1: Outcomes for CEO Nursing Career Ladder-LPN Program as of May 2012

	2008	2009	2010	2011	Total						
Number of Graduates	39	39	39	40	157						
Number Earned LPN License	32	37	34	36	139						
Number of Job Placements		36	19	5	90						
Supplemental HHC Residency Program											
Number of Graduates Participating	NA	NA	12	21	33						
Number of Participants Hired Full Time or Given More Hours	NA	NA	8	0	8						

It also shows that, in the program's first two years, 80 percent of graduates gained employment as LPNs. Of those 68 jobs, 42 (60 percent) were at HHC's Coler-Goldwater Hospital in long-term care. While the residency program is an innovative response the hiring problem, it is a shift from the original model, in which participants were expected to gain full-time employment at HHC after one year of training.

Job placement has not been a challenge for early graduates of the RN program, but the program has had low student retention because participants entered while they were in their pre-clinical phase of studies and most did not advance through the completion of the four-year degree. In addition to all that CEO and its partners know about the challenges of college completion and long training programs, we also learned that many students who identify early as nursing majors do not necessarily have a clear understanding of the academic and clinical (i.e. technical, physical, and emotional) requirements of the profession. Of the 145 who enrolled in the program between 2007 and 2009, 60 percent (87) did not complete the pre-clinical phase. ³ In 2009 CEO and HHC determined that the program could not afford to invest in students until they had demonstrated a commitment to and aptitude for nursing. The program stopped recruitment at that time so that CEO and HHC could assess if retention improved once students arrived at the clinical phase.

As of July 2012, retention through the clinical phase has been stronger, with 70 percent of those who entered (58) having either graduated or remain enrolled. LIU reports an overall two- year retention rate of 46 percent for its non-CEO students. CEO asked Metis Associates to conduct an interim evaluation in 2010, the evaluators predicted this higher outcome:

Given that the CEO Nursing Career Ladder RN Program students enter the LIU program with a slightly higher GPA than the average LIU student (3.0 vs. 2.75), and that HHC is providing a retention support services

³ See *CEO Nursing Career Ladder RN Program: Program Review*, Metis Associates. 2010 for data on reasons students left the program and other analyses.

program⁴ for clinical program students, it might be expected that the retention rate for CEO Nursing Career Ladder RN clinical program students would remain at approximately 70% throughout completion of the two year program. RN Interim Evaluation. Metis Associates 2010.

The program seems to be performing as anticipated through the clinical phase. This suggests that the model could be less costly while still effective if it is designed to support students only after they have completed pre-clinical work. However, the evaluation report also identifies the trade-offs of admitting only more-accomplished students, which can have a 'creaming' effect though still targets low-income students. As we collect and analyze more data on program completers, we will continue to adjust the program model so that it strikes the right balance between fulfilling our responsibility to invest public dollars effectively and achieving our goal of providing transformative opportunities to New Yorkers in need.

Next Steps: FY13

Despite the challenges described, it remains true that nursing jobs are expected to be high-demand positions in a growing sector that offers a boost out of poverty. CEO's evaluations (see attached) of both programs show high student satisfaction and that they are reaching the target population of low-income New Yorkers. In FY13 CEO will maintain its annual \$1.3 million investment in nursing, but will again adjust the program model.

Given the current reductions in hiring and market preference for nurses with experience and more advanced degrees, in FY13 the program design will shift to support fewer LPNs and more RNs. CEO will support 20 new LPNs instead of 40, and will support 20 of our previous LPN graduates through the completion of a one-year accelerated RN associate's degree at Helene Fuld College of Nursing. This will reduce the number of new LPN graduates entering the field at a time of lower demand while supporting previous graduates in earning an advanced degree. It should also result in higher rates of RN retention by enrolling students who have already successfully completed some clinical coursework as LPNs into an associate's degree program that is faster than a bachelor's degree in nursing.

Furthermore, reducing slots in the LPN program rather than eliminating it will allow for a rapid revival when and if appropriate. There are indications that the current slowdown is only temporary, and HHC and private health care providers will resume hiring LPNs at higher rates as demand and capacity for long-term care increases. Therefore CEO, HHC, and the NYC Department of Education (whose Department of Adult and Continuing Education provides the LPN training through an agreement with CEO and HHC) want to maintain the Nursing Career Ladder LPN program so that it could be expanded again when the market improves.

In 2013 CEO will assess rates of retention and job placements for the Nursing Career Ladder program and make recommendations for FY14 at that time.

Kate Dempsey Director of Budget and Operations Carson Hicks, Ph.D. Director of Programs and Evaluation

⁴ The retention support services program is funded by \$500,000 in annual funding received as a grant from the Health Resources and Services Administration (HRSA).

July 2010

Participant Feedback on the NYC CEO Licensed Practical Nurse Program

SUBMITTED TO:

NEW YORK CITY CENTER FOR ECONOMIC OPPORTUNITY



90 Broad Street Suite 1200 New York, New York 10004 212-425-8833 www.metisassociates.com metis associates



2010 CEO Response to Participant Feedback on the NYC CEO Licensed Practical Nurse Program

CEO created its Licensed Practical Nurse (LPN) Program in 2007 in partnership with the NYC Department of Education and the Health and Hospitals Corporation. The goal of the CEO LPN program is to raise the living standards of low-income individuals by providing them with training and support to become LPNs – a career projected to offer good wages and future growth.

CEO knows from performance data that the program has a very high graduation rate and that this rate is comparable to similar outcomes reported by DOE for its non-CEO LPN cohorts (in which participants are not required to meet income eligibility criteria and are responsible for their own tuition). The small size of the program limits options for more rigorous evaluation. To inform program assessment, CEO charged its external evaluators, Westat and Metis Associates, to collect feedback from LPN students and graduates to learn about their experiences. Participant feedback has helped CEO understand better the program's perceived value among its target population as it planned next steps.

Often a struggle with long-term training programs, this like other LPN programs has high graduation rates. However, HHC's hiring of LPNs has slowed since 2009. But while the recession has dampened the market, experts still contend that projections for the health care field and demographic trends support long-term opportunities for LPNs and RNs. CEO and its partners continue to analyze labor market data to determine projected growth for these particular positions.

The report captures participants' perceptions of the LPN program and their recommendations for improvement. As developments in health care may present new opportunities to fund training and education for jobs, the report has informed CEO's strategic planning around health care sector workforce development.

Findings

Metis collected feedback from current students and graduates. The students participated in focus groups and graduates completed a written survey.

Overall, participants expressed high satisfaction with the program. Students appreciated the free tuition and other supports and the guaranteed employment after graduation. They also praised the teachers and high quality of instruction.

Participants cited some challenges they experienced in the program, such as: financial difficulty while studying full time, difficulty acclimating to the workplace, and personal and family stresses.

Recommendations

Metis makes five recommendations based on the main challenges identified by students. CEO reviewed each with HHC and DOE. Below is a summary of CEO's responses and next steps.

- 1. Consider enhancing and expanding hands-on clinical experiences. HHC and DOE are exploring enhancements to the Transition to Practice (clinical) portion of the program. (Significant changes to the curriculum require State approval.) To help graduates gain experience post-graduation, HHC created an LPN Residency program in which recent graduates work part-time at two HHC facilities. This program has the added benefit of reducing overtime costs that the facilities would otherwise pay to full-time staff.
- 2. Explore recognition of the LPN program by CUNY for those graduates seeking to pursue an RN degree. CEO is working with DOE and CUNY to explore an articulation agreement.
- 3. Consider providing a monthly stipend to program participants. CEO provides free tuition, books, materials, and staff support, and agrees that the financial challenges experienced by participants enrolled in a full time program are real. To address additional needs, HHC staff are available to assist students in securing supports such as public benefits throughout the duration of the program. The program does achieve a 98% graduation rate, so these supports appear to encourage program completion. All partners continue to look for additional ways to support students.
- 4. Consider providing an on-site counselor/social worker to address participants' personal and family stresses. HHC and DOE are working to identify sources of social work counseling services, such as interns from nearby colleges. HHC support staff include two counselors who are available to work with students regarding any challenges they experience.
- 5. Consider providing additional support to LPN graduates. Regarding support for the licensing exam: The pass rate for the NCLEX-PN licensing exam was 82% for the first cohort and 97% for the second cohort. It seems that students are sufficiently prepared to take the exam. The program offers a prep course to all students and will continue to do so.

Regarding support in the workplace: Program staff are aware that graduates experience difficulty acclimating to the workplace. HHC has begun working with its Office of Corporate Recruiting to integrate job readiness training into the curriculum.

Kate Dempsey
Director of Budget and Operations

Carson Hicks, Ph.D. Director of Programs and Evaluation

Graduates' Feedback on the NYC CEO Licensed Practical Nurse Program July 2010

Introduction

The NYC Center for Economic Opportunity (CEO) has funded approximately 40 initiatives across some 20 sponsoring agencies aimed at reducing the number of working poor, young adults, and children living in poverty in New York City. CEO is committed to evaluating its programs and policies and is developing a specific evaluation plan for each of its initiatives. For example, several major new initiatives will implement random assignment evaluations or other rigorous designs. Some programs are slated to receive implementation and outcome evaluations, while others may be evaluated using readily available administrative data. This differentiated approach reflects the varied scale of the CEO interventions, data and evaluation opportunities, and finite program and evaluation resources. Westat and Metis Associates are evaluating many of these programs on behalf of CEO. The purposes of the evaluations are to collect and report data on the implementation, progress, and outcomes of the programs in the CEO initiative to inform policy and program decision-making within CEO and the agencies that sponsor the programs.

CEO supports several workforce development programs that focus on health care careers including the Licensed Practical Nurse program, a Registered Nurse Training program, and a health care sector center that trains and places job seekers in a variety of health professions.¹

This brief describes the qualitative assessment conducted by Metis Associates of the Licensed Practical Nurse (LPN) program. Metis Associates gathered feedback from participants as they completed the program and from graduates more than a year after completing the program. CEO sought to learn more about whether participants felt adequately prepared by the program, suggestions for improvement, and how they fared in the workplace. Metis collected data from focus groups and a survey.

Metis conducted two focus group sessions with Licensed Practical Nursing (LPN) program participants in June 2009. Participants had concluded their 11-month program and were getting ready to graduate. The LPN program started in 2007; the participants for the focus group sessions represent the second program cohort. The focus group sessions were attended by 38 of the 39 program participants. The sessions were held at the program site – The Coler-Goldwater Hospital at Roosevelt Island in New York City. Participants received two movie tickets as an incentive for participating in the focus group sessions. The focus group sessions aimed to uncover information in three main areas: participants' motivation for enrolling in and completing the program; satisfaction with the program; and plans for the future. The focus group Interview Guide is included as Appendix A.

In November-December 2009, Metis also conducted a survey of the first LPN program cohort. This group had completed their training in June 2008 and had been in the workforce for approximately 18 months. First cohort LPN graduates were offered a \$30 gift card for filling out the survey which was available online as well as in hard copy. In spite of outreach from LPN

-

¹ See www.nyc.gov/ceo for more information.

program staff, a total of only 13 out of 40 LPN graduates participated in the survey, for a response rate of 32.5%. The survey is included as Appendix B.

Program Description

The CEO-sponsored LPN program at the Coler-Goldwater Specialty Hospital and Nursing Facility located on Roosevelt Island, New York, is a collaboration between the Health and Hospitals Corporation (HHC) and the New York City (NYC) Department of Education (DOE). There were already two existing DOE LPN programs in Brooklyn and Manhattan, and each recruits approximately 60 students annually. The CEO-sponsored HHC/DOE LPN program recruits about 40 students annually who meet income eligibility criteria. (The non-CEO cohorts in Brooklyn and Manhattan do not have income eligibility criteria.) Recruitment and preparation for the CEO program began in February 2007 and classes began in September 2007. The State Education Department Office of Post Secondary Programs and Office of Professions have approved the curriculum for this program, and DOE is responsible for implementing it.

The goal of the CEO LPN program is to raise the living standards of low-income individuals by providing them with training and support to become licensed practical nurses (LPNs) – a career that is projected to offer good wages and future growth. With the LPN credential, individuals can earn a starting HHC salary of approximately \$40,000 per year.

The program receives approximately \$1 million in funding from CEO and can accommodate up to 40 students. The program is an accelerated LPN program and students complete the program in less than one year, compared to a more traditional two-year model. Participants in the CEO program must be at or under 130% of poverty unless they are HHC employees. HHC was interested in developing a career ladder for its employees and had a private grant funding that allowed employees to receive their salaries while in the training program. In the first program year, 10 of the 40 students were HHC employees; in the second year without the additional grant six HHC employees participated and 34 slots were allocated to other income eligible participants. The CEO-sponsored LPN program occupies a separate wing of Goldwater Specialty Hospital and Nursing Facility on Roosevelt Island. The space provides several classrooms; a computer lab; a teacher's lounge; a room with hospital beds, medical equipment, and human patient simulators (i.e., dummies); a multi-purpose room; and administrative offices. Each student has access to computers with high-speed internet.

All students in the LPN Program receive free tuition paid for by CEO. The program also provides free books, lunch during clinical rotations, and uniforms. In addition, it provided a preparation course to help several participants increase their reading and math skills prior to beginning the intensive LPN training. In addition, HHC staff provides counseling and support to participants.

Graduating Student Focus Group Findings

• Motivation

About half of program participants were in health-related jobs at the time of application. A total of 17 out of 38 focus group participants (45%) were employed in a health-related job prior to applying to the LPN program. This group was employed in various jobs such as hospital technician, private health care aide, Lamaze teacher, nursing home aide, dental office receptionist, and medical assistant. Another 18 focus group participants (47%) held many different non health-related types

of jobs at the time of their application to the LPN program. These included, among others, teacher, tax preparer, catering, customer service representative, correction officer, 911 police operator, restaurant/hospitality worker, and gardener. Two participants (5%) had been full-time college students and 1 (3%) was unemployed prior to applying to the LPN program. Regardless of prior occupation, most focus group participants indicated that they had always had an interest in nursing as a career. Several, in fact, had looked into applying to other LPN and RN nursing programs. They learned about the program through various means such as the NYC government website; Google search; referrals from other programs; recommendation by HR at Coler-Goldwater; recommendation from working LPNs; recommendation from RN student; and referral from nursing manager.

Free tuition and program duration were the most attractive program features. A large number of respondents indicated that the free tuition and the 11-month duration had been the most attractive features of the LPN program at the time of application. Other attractive program features were: promise of employment after graduation; convenience of location; pre-program preparation; prestige as a NYC program; lack of a long waiting list; and, organized program administration and management that was evident at the time of application.

Supporting themselves financially was a tremendous challenge for most non-HHC program participants. The program strongly discourages CEO participants from working while they are in the program so that participants can devote themselves to full-time study, although it recognizes that some participants have to have some limited income. HHC employees (who are on full-time, paid, educational release) are not allowed to work. Of the 38 focus group participants, 17 (45%) needed to apply for public assistance. Several depended on their families and/or exhausted savings. Some worked in jobs on the side, for instance, bar tending or taking evening or weekend hospital shifts, as a necessity but agreed that it had been physically exhausting to do so while coming to classes daily and keeping up with the program requirements. One participant related how s/he had been unable to obtain housing support because as a student s/he could not verify a source of income. Others indicated that they had lost subsidized childcare when they enrolled in the LPN program as full-time students.

Financial and emotional support from families was perceived as a key to success by many participants. A small number of participants described how they had been unable to care for young children while involved with the program and relied on other family members to care for their children. One sent his/her child to California; another sent his/her child to a grandmother in another country. Beside these extraordinary circumstances involving family separations, many focus group participants agreed that the intensity of the program had required many sacrifices at home and a strong reliance on family support.

• Program Satisfaction

Overall satisfaction with the program was very high. On a scale of 1 (lowest rating) to 10 (highest rating), 14 of the 38 focus group participants (37%) rated the overall program as a 10. The mean rating among all focus group participants was 8.96.

The preparatory course was very appreciated by those who took it. Seventeen focus group participants took the prep course. All those who took the prep course agreed that it had made a big difference in reinforcing their basic skills. In addition, for some, getting used to the commute and the schedule was another positive aspect of the prep course. Some participants, however, indicated

that they did not know about the prep course as it was not advertised. If they had known about it, they would have taken the prep course.

Participants thought very highly of the quality of the teachers and appreciated their support and encouragement. There was overwhelming agreement that teachers were the greatest strength of the program. When discussing specific courses, most participants agreed that Pharmacology had been the best course. By contrast, Nutrition was perceived as one of the weakest courses.

The following were some of the comments provided by focus group participants:

There were diverse opinions about the clinical rotations. Some focus group participants felt that the sequence of classroom to clinical work had been good. Others felt that clinicals should be introduced toward the end of the program, when they have more knowledge (they are currently introduced in January, half-way into the program). A couple of participants suggested that the classroom/clinical rotation should take place every two weeks rather than every week. Even though opinions varied about the right timing and sequence of the clinical rotations, there was a general sense that they had been a very helpful program component.

Other program components and features were also appreciated. Some focus group participants also pointed to the support received from other staff ("the Manhattan staff is readily available and supportive") and consultants from ATI (a technology company). Some participants also mentioned online books, access to individual PCs, provision of flash drives, and state-of-the art technology (Smart Boards) as program strengths.

Participants would recommend the LPN program to their friends. There was general consensus that they would recommend the program to their friends and, actually, some had done so already. However, they were careful to note that they would not recommend the program indiscriminately, but only to friends who are mature, dedicated, hard-working, and ready to face the challenges of a very intensive and demanding program.

Participants offered various recommendations for improving the program. While overwhelmingly very satisfied with the program, participants still provided recommendations for improvement. These are detailed below:

O There was general consensus that the provision of a monthly stipend, something that could at the very least cover transportation costs, would have alleviated the financial

[&]quot;Teachers are very caring and knowledgeable."

[&]quot;Teachers are better than those of other programs."

[&]quot;Teachers coordinated content covered during class. In the beginning all teachers taught basic material and eventually moved on to coordinate their lessons, so students would learn the same topics from different perspectives."

[&]quot;Teachers are most dedicated and the student-teacher ratio is about 8:1 or 10:1."

[&]quot;Using other hospital employees as resources to share their knowledge is a big strength of the program."

[&]quot;Teachers were very tolerant and patient with students in catering instructional strategies to their individual learning styles."

[&]quot;The dedication of teachers ... (was the best thing)."

[&]quot;Teachers are excellent and teach material that may not be in the book and share from their own experience."

- strains encountered by the non-HHC participants (a state grant enabled HHC participants receive their full salary while involved in the training program).
- O There was also consensus regarding the desire to have the LPN training program recognized by CUNY and other institutions of higher education, especially as some participants planned to go on for the RN degree. Currently, they explained, only the Helene Fuld College of Nursing RN program would recognize their LPN training. However, many would prefer to go on to the CUNY RN program if they could get credits accepted for their LPN training. Part of their motivation was financial, as they claimed that the CUNY program is cheaper than the Helene Fuld program, and some felt that a CUNY degree would be more prestigious.
- O A number of participants agreed that the program would be strengthened by having an on-site counselor/social worker (not a teacher functioning as a counselor) available to discuss personal issues. They indicated that often it is just a need to vent, although sometimes it is a need to address more delicate personal and/or family issues.
- A number of the participants advocated for having additional resources for the training – for instance, providing assistants to the teachers and having more regular stethoscopes and teaching stethoscopes.
- o There was overwhelming agreement that the uniforms worn during clinical rotations were antiquated ("Florence Nightingale-like"), cumbersome, and prone to ridicule. Several participants related how some patients had laughed at their uniforms and others confused them with Housekeeping staff.
- O Some participants would have liked a greater exposure to acute care specialties as part of their clinical rotations, as these would have enhanced their skills if applying to acute care facilities.
- O A number of recommendations had to do with the clinical rotations, but there was no clear consensus here. A couple of participants would have wanted clinicals to start earlier in the year, in order to provide an earlier connection between theory and practice. However, others advocated for clinicals to start later in the year, after having a better grasp on the theory. Some advocated for a two week rotation between classes and clinicals, but this was not shared by others who liked the one week rotation model.
- Other recommendations pertained to: streamlining the hospital placement process to identify hospitals with LPN vacancies; having a better organized orientation in order to have more time available for classroom work; deferring the 2-year time commitment for those wanting to go on to the RN degree and serving the 2 years as an RN; having additional opportunities to familiarize participants with non-medical backgrounds with hospital environments; having evening classes; having the flexibility to stay after class for counseling or other social services.

• Plans for the Future

Participants were excited, feeling accomplished, and, in general, confident about moving into LPN jobs. Although feeling exhausted, participants were generally optimistic that they would pass the state board exams and be able to work as LPNs. Some expressed anxiety about the state board exams and were grateful that the program includes an exam review period after graduation.

Several participants expressed an interest in getting their RN degrees. They see the LPN a first step in a career ladder that will lead to an RN degree. One of the participants, in fact, said that her hope was to continue her education and become an M.D.

A number of participants hoped to get jobs in acute facilities as well as closer to their homes. Although a guaranteed placement in a long-term care facility provides a sense of security, some participants hoped that they would have other options, particularly working in an acute care facility, after licensing.

Participants see a bright future. Many participants indicated that NYC benefits are very good and that they would not mind continuing to work for HHC beyond the 2-year commitment. Others, who may move out of NYC in the future, indicated that the prestige of a NYC training program and work experience would prove very beneficial when seeking a job in another state.

Alumni/Working Graduates Survey Findings

Survey respondent characteristics

The characteristics of survey respondents are presented in Table 1. The majority of the respondents (61.5%) were female and Black (53.8%). Almost half of them (46.2%) were in the 40-50 year old range and over a third (38.5%) lived in Queens. Over half of them (53.9%) had 3 or more dependents. A little over two-thirds of the respondents (69.2%) were not HHC employees when they were involved in the LPN training. Respondents were generally representative of the original cohort of students.

Table 1. Characteristics of survey respondents

Characteristic	Survey Re	rvey Respondents Full Cohort		
Characteristic	Number	Percent	Number	Percent
Gender:				
Male	4	30.8%	9	23.1%
Female	8	61.5%	30	76.9%
Unreported	I	7.7%	0	0%
Total	13	100%	39	100%
Race/Ethnicity:				
Asian/Pacific Islander	2	15.4%	4	10.2%
Black, non-Hispanic	7	53.8%	22	56.4%
Hispanic-Latino	I	7.7%	3	7.7%
White, non-Hispanic	I	7.7%	I	2.6%
Multiracial	I	7.7%	0	0%
Unreported	I	7.7%	9	23.1%
Total	13	100%	39	100%
Age:				
20-25 years	I	7.7%	5	12.8%
26-30 years	3	23.1%	8	20.5%
31-39 years	3	23.1%	15	38.5%
40-50 years	6	46.2%	11	28.2%
Total	13	100%	39	100%
Borough:				
Bronx	2	15.4%	6	15.4%
Brooklyn	3	23.1%	9	23.1%

Characteristic	Survey Re	spondents	Full Cohort		
Characteristic	Number	Percent	Number	Percent	
Manhattan	3	23.1%	12	30.8%	
Queens	5	38.5%	12	30.8%	
Staten Island	0	0%	0	0%	
Total	13	100%	39	100%	
No. of Dependents:					
None	3	23.1%	15	38.5%	
1	I	7.7%	9	23.1%	
2	2	15.4%	6	15.4%	
3	4	30.8%	5	12.8%	
4	0	0%	2	5.1%	
5 or more	3	23.1%	2	5.1%	
Total	13	100%	39	100%	
HHC Employee Status at time of training:					
Yes	4	30.8%	9	23.1%	
No	9	69.2%	30	76.9%	
Total	13	100%	39	100%	

Nine of the 13 survey respondents (69.2%) indicated that they were working as LPNs at the time of the survey. Two respondents indicated that they were not working as LPNs because they had not passed the NCLEX-PN licensing exam and 1 had a family emergency which prevented this respondent from working as an LPN. These three individuals were working as other types of health care providers. For those working as LPNs, the mean number of months of employment was 12. Four of the respondents working as LPNs were working in a long-term rehabilitation hospital, another four worked in acute or sub-acute hospitals, and one worked in a clinic.

Program effectiveness

When asked to assess the effectiveness of the *clinical classes*, respondents were generally positive about their contribution in preparing them for their current jobs (46.2%, very effective, and 15.4%, effective) and preparing them for the types of patients they would be seeing (30.8%, very effective, and 23.1%, effective). However, they were less positive about the effectiveness of the *clinical classes* in preparing them for working with other hospital staff (15.4%, very effective, and 23.1%, effective). These results are shown in Table 2.

Table 2. Effectiveness of clinical classes

		Percentage of LPN Program Participants (N)											
How effective were the clinical classes at	Total Respondents	Very effective	Effective	Somewhat effective	A little effective	Not at all effective	N/A – I am not working as an LPN						
a. Preparing you for your current job?	13	46.2% (6)	15.4% (2)	7.7% (1)	15.4% (2)	0% (0)	15.4% (2)						
b. Preparing you for the types of patients you would be seeing?	13	30.8% (4)	23.1% (3)	38.5% (5)	0% (0)	0% (0)	7.7% (1)						
c. Preparing you for working with other	13	15.4% (2)	23.1% (3)	38.5% (5)	15.4% (2)	0% (0)	7.7% (1)						

hospital staff?

When asked to assess the effectiveness of the *clinical rotations*, respondents generally felt equally positive about their contribution in preparing them for the types of patients they would be seeing (42.2%, very effective, and 7.7%, effective), general job preparation (30.8%, very effective, and 23.1%, effective) and preparation for working with other hospital staff (23.1%, very effective, and 30.8%, effective). See Table 3 for these results.

Table 3. Effectiveness of clinical rotations

		Percentage of LPN Program Participants (N)											
How effective were the clinical rotations at	Total Respondents	Very effective	Effective	Somewhat effective	A little effective	Not at all effective	N/A – I am not working as an LPN						
a. Preparing you for your current job?	13	30.8% (4)	23.1% (3)	7.7% (1)	15.4% (2)	0% (0)	23.1% (3)						
b. Preparing you for the types of patients you would be seeing?	13	46.2% (6)	7.7% (1)	30.8% (4)	0% (0)	0% (0)	15.4% (2)						
c. Preparing you for working with other hospital staff?	13	23.1% (3)	30.8% (4)	30.8% (4)	0% (0)	0% (0)	15.4% (2)						

The survey attempted to get a sense of the contribution of the hospital setting for preparation for the LPN position. On a scale of 1 to 10, where 10 is the highest rating, survey respondents provided a mean rating of 7.5. The following are selected participant comments regarding their ratings:

- "10 The setting allowed us greater accessibility to interact with patients and also observe and learn about them (medical diagnoses). It also allowed us the opportunity to feel as if we were a part of the healthcare staff. We were also able to network and associate with other active providers of different specialties, gaining valuable knowledge."
- "8 The hospital setting not only prepared me to be an LPN, it also prepared me to return to school to become an RN."
- "6 It was really an advantage to have the program in a hospital setting because you would get an idea of the patients, the surroundings, and the workers."

Survey respondents also provided a rating for the overall effectiveness of the program in preparing them for the LPN position. On a scale of 1 to 10, where 10 is the highest rating, survey respondents provided a mean rating of 7.4. The following are selected participant comments regarding their ratings:

- "10 Because the program was a hospital-based program, the exposure to the setting helped in the preparation for the LPN position."
- "9 The LPN program with its very dedicated and highly qualified faculty and staff made the big difference in preparing me to my current position in the nursing staff."
- "5 The LPN program didn't really do an exceptional job for my preparation as an LPN. We lacked clinical experience. We had too much classroom hours."
- "5 Too fast and a lot of information is missing."

When asked about the work-related challenges that they had encountered while working, respondents listed different types of challenges. Six out of the 9 surveyed referred to difficulties working as members of a health *team*. Challenges included dealing with RNs, who delegated work to them, as well as dealing with lower-titled staff to whom they (the LPNs) delegated work. Two respondents referred to getting work done within the available time allocation – managing paperwork or handling care for many patients. Other responses referred to challenges with practical skills such as giving bed baths to inserting catheters, dealing with patient behavior, and getting familiar with generic name medications.

Survey respondents were also asked to provide recommendations for improving the LPN program. Although some respondents indicated that the program had done an excellent job with their preparation and could not offer a recommendation for improvement, most of the other respondents would have liked more hands-on clinical experiences as well as more exposure to the actual work of an LPN, giving emphasis to the LPN's "scope of work" in a hospital setting. Another recommendation pertained to earlier preparation for the NCLEX test.

When asked whether it had been easy or difficult to find a job after graduating from the LPN program, 36.4% indicated that it had been "very easy" and 27.3% indicated that it had been "somewhat easy". A few respondents who encountered difficulties finding a job gave reasons such as a hiring freeze or lack of experience with specific populations. Main recommendations included earlier coordination and more assistance with the placement process.

Satisfaction with job and plans for the future

When asked how satisfied they were with their current jobs, the mean rating from survey respondents was 6 (scale of 1 to 10, where 10 is the highest rating). Several respondents provided comments to explain their ratings. A common theme for most of the comments was the limitations of the LPN role. In general, these respondents wanted more responsibility and more opportunities to learn and further their careers. In fact, when asked whether they intended to pursue the RN degree in the future, 12 out of 13 respondents responded "yes" and the other respondent indicated that s/he was currently enrolled in an RN program. Thus, it was evident that the LPN degree represented a stepping stone toward a more advanced degree in healthcare for all 13 respondents, even though 3 of these respondents were not yet working as LPNs.

Conclusions and Recommendations

Results from two focus groups conducted with 38 CEO LPN program participants at the end of the training program (second cohort) indicate a very high degree of satisfaction with the program. Participants were appreciative of the opportunity provided to them and felt proud of their accomplishments. They considered this a very rigorous and challenging program that demanded a lot from them. This was a very highly motivated group who persevered in spite of financial strains (especially for the non-HHC participants) as well as individual and family stresses. Many perceive the program as having made a significant impact on their lives. Program participants made numerous recommendations not because they were dissatisfied with the program, but because they genuinely care about strengthening the program. While there were many program features that were perceived as helpful, they overwhelmingly felt that the knowledge, care, and support exhibited by their teachers was the most important feature of the program – what encouraged them to remain in the program and aspire to a nursing career.

While the response rate (32.5%) for the survey was not as high as anticipated or desired, findings were illuminating. Results from the survey of the first LPN program cohort – this group had graduated 18 months prior to the fielding of the survey - also confirmed satisfaction with the program, although respondents were not as euphoric about the program as the graduating students in the focus groups. One of the strongest recommendations coming for this group was to expand and enhance the "hands-on" clinical experiences in the program. In addition, many of the LPNs in the survey referred to challenges working as members of a health team and the upward and downward delegation of work. For them, the program provided little training in how to deal with those situations. Interestingly, all 13 survey respondents (including three who were not yet working as LPNs) indicated that they planned to go on and obtain an RN degree.

While CEO and program implementers should give serious consideration to all of the recommendations offered by the participants, there are five recommendations that merit special discussion. These recommendations address important features of the program model.

- Consider enhancing and expanding hands-on clinical experiences. The clinical rotations represent a critically important program component, which help trainees gather important hands-on experience with patients. Program graduates who were already working as LPNs felt that those experiences should be enhanced and expanded during training and that they also should include more opportunities to explore and discuss the interpersonal and employment dynamics of health teams in hospital settings.
- Explore recognition of LPN program by those graduates seeking to pursue an RN degree at CUNY. CUNY has at least one program that provides for an articulation from LPN to RN. That program, however, does take longer to move from LPN to RN than the existing program at the Helene Fuld College of Nursing, which is a more expensive though well-regarded private school. According to the focus group respondents, the CUNY RN program does not accept credits from the program they have just completed. Creating a stronger articulation between the CEO LPN program and CUNY, where the transfer of some credits may be possible, would result in increased opportunities at a lower cost for those who wish to further their education and attain a more advanced nursing degree. Since many of the focus group respondents and all of the survey respondents expressed a desire to pursue an RN degree, it will be really important to facilitate this career progression.

- Consider providing a monthly stipend to program participants. In spite of the fact that the program is tuition-free, participants endure significant financial hardships to make it through the program. A small monthly stipend designated for transportation and incidental expenses would provide a much-needed financial support to program participants. The program has a high 98% graduation rate so clearly participants are finding a way to make it through the training; but the focus groups do document the personal struggles to do so.
- Consider providing an on-site counselor/social worker to address participants' personal and family stresses. Participants expressed a strong desire to have an external person, not one of their teachers, fulfilling this role. A possible model might be to have a counselor with limited on-site hours to provide group and individual sessions designed to help release stress and help problem-solve situations. The emphasis would be on short-term, not long-term, counseling goals. An experienced counselor with a cognitive-behavioral approach and experience in the use of stress-reduction techniques would be the ideal resource for program participants.
- Consider providing additional support to LPN program graduates. Post-graduation support might entail providing a number of review sessions to help prepare graduates for the NCLEX-PN licensing exam. Once employed as LPNs, program graduates would also benefit from periodic workshops focused on addressing job challenges, providing peer support, and sharing the professional expertise of the program staff.

Appendix A Focus Group Protocol for LPN Graduates June 2009

Hello, I am	and this is	We are researchers fr	om Metis
Associates and, in co	ollaboration with Westat, we are	conducting the evaluation of CEO	programs
in New York City.	As part of this evaluation, we a	are conducting focus groups with	graduates
from the LPN prog	ram in order to find out more	about your motivation for applying	ng to the
program, your satisf	faction with the program, and you	ur plans for the future. The inform	nation we
will gather in this se	ssion will help CEO strengthen the	he LPN program.	

The information we gather is strictly confidential; you will not be identified by name in any reports. If you have no objections, we'd like to tape this interview so we don't miss any information. We will take notes, but we also like to transcribe the recording to make sure that we don't miss anything.

We have several forms for you to read and sign if you are in agreement about participating in the focus group. Participation is voluntary. You are not required to participate and you do not need to answer any question that you are not comfortable with. The focus group will last about 1½ hours. To show appreciation for your participation, CEO is providing two free movie tickets for all who agree to be part of the focus group. Lunch will be provided and should be arriving soon.

[Go over forms. Explain need for notary public. Distribute - Adult Consent Form, Tape Recording Assent Form, and DOL Authorization Form.]

OK. We are now ready to start. We would like for everyone to participate in the discussion, but you don't have to talk in any particular order. Any questions before we begin?

First of all, please introduce yourselves. Let's go around the roomThank you. I'd like to start by asking you some questions about what you were doing before you signed up for the program

[Motivation]

- What were you doing before entering the program? (PROBE)
- Were you looking for a training program? Why? (PROBE)
- Did you have a specific interest in a nursing career? (PROBE)
- What would you have done a year ago if this program had not been available to you? (PROBE)
- How did you support yourselves during the training? (PROBE Public assistance? Family? Off-the-book work?)
- Many of you have children, right? Who has children? And how did you balance training and family obligations? (PROBE: Challenges? Arrangements?)

[Program Satisfaction]

- On a scale of 1 to 10, where 1 means Very Poor and 10 means Excellent, how would you rate the program as a whole?
- Now let's get more specific about the program. How many participated in the prep program? Was this helpful? How so? (PROBE)
- What did you like best about the program? And what did you like least about the program? (PROBE)
- What did you think about the combination of clinical classes and clinical work at the hospital? (PROBE)
- Did staff provide you with the support you needed? Who provided you with the most support? What kinds of support did you need? Did you need referrals to others services? What kind of services? (PROBE)
- How could the program be improved? What would be one or two things that you would change about the program? (PROBE)

[Entering Workforce]

- How many of you have jobs as LPNs now? How do all of you feel about getting a job as an LPN? Confident? Scared? Why? (PROBE)
- What are your career plans for 5 years from now? How about for 10 years from now?
- What change or changes has this program made in your lives? What did you learn about yourself? (PROBE)
- Is there anything else you would like to share about how the program has prepared you?
- Would you recommend this program to your friends? How many would recommend it?

Thank you so much for taking the time to participate in this focus group. You have given us a lot of good information about your experiences that, I am sure, will help CEO strengthen the LPN program. Are there any questions before we end?

APPENDIX B

LICENSED PRACTICAL NURSE (LPN) SURVEY

Fall 2009

This survey is part of an evaluation of the Center for Economic Opportunity's (CEO) Licensed Practical Nursing (LPN) program. We are asking the first cohort of LPN program participants (2007-2008) to complete this survey. Its purpose is to learn about your work experiences after completing the LPN program and to get your assessment of the LPN program. Your responses to the survey will help evaluate the effectiveness of the LPN program and strengthen its operations.

The survey is voluntary and will only take 15-20 minutes to complete. You do not have to take it if you do not want to. If you decide to take the survey, you can skip any question that you do not want to answer. An incentive (\$30 gift card) will be provided to those who complete the survey as a token of our appreciation for your time and effort. It is important that you provide your contact information on the last page of this survey so that we can mail you the gift card. Your contact information will be kept confidential.

There are no known risks to participation in this study. Your answers to the survey will be kept confidential. That means that all individual answers are private and will not be shared with any CEO, HHC or DOE program staff. Only the researchers processing the responses will see the completed surveys and survey data will only be reported in aggregate form. That is, we will report the results for all respondents in tables as numbers and percentages and other write-in answers will be reported anonymously.

The survey can be completed online by typing the following URL on your Internet browser: www.surveymonkey.com/metis_Ipn. If you decide to complete the printed survey, please enclose it, once it is finished, in the postage-paid envelope provided and place it in any USPS mailbox. You should only complete the survey once – either online or using the enclosed printed copy. Completed surveys are due November 20. If you have any questions, please contact Rebecca Swann or Ranjana Mendes at Metis Associates: 212-425-8833.

Thank you for your participation!

By signing below you agree to be part of this study.	
NAME (PRINT):	
SIGNATURE	DATE

CURRENT JOB

1.	. Were you an HHC employee at the time you started the LPN program? 1 Yes 2 No												
2.	P. Are you currently working as an LPN? 1 ☐ Yes (Skip to Q3) 2 ☐ No (Skip to Q2a)												
	2a. If not currently working as an LPN, are you working as another type of health care provider? 1 Yes, please indicate your position 2 No (Skip to Q5)												
	2b. Why are you not currently working as an LPN? 1 I have not passed the NCLEX-PN exam (Skip to Q5) 2 I have not been able to locate a convenient facility for employment. (Skip to Q5) 3 Other (Please describe:												
3.	3. How long have you been working as an LPN? Enter length of position as LPNmonths												
4.	4. In what type of facility do you currently work as an LPN? 1 Hospital – Acute care 2 Hospital – Long-term rehabilitation 3 Other (Please describe:)												
JO	JOB PREPARATION												
This section of the survey asks how well the clinical classes, clinical rotations, and the LPN program overall have prepared you for the job of an LPN.													
5.	How effective were the <u>clinical</u> <u>classes</u> at	Very Effective	Effective	Somewhat Effective	A little Effective	Not at all Effective	N/A – not working as LPN						
a. F	Preparing you for your current job?												
	Preparing you for the types of patients you ald be seeing?												
	reparing you for working with other pital staff?												

6. How effective were the <u>clinical</u> <u>rotations</u> at	Very Effective	Effective	Somewhat Effective	A little Effective	Not at all Effective	N/A – not working as LPN					
a. Preparing you for your current job?											
b. Preparing you for the types of patients you would be seeing?											
c. Preparing you for working with other hospital staff?											
7. To what extent did the program's hospital setting contribute to your preparation for the LPN position? Please rate on a scale of 1 to 10, where 1 means Not at All and 10 means To a Great Extent. Please check the appropriate box. 1 2 3 4 5 6 7 8 9 To a Great											
Not at All 1 2 3 4	5	7 7	8	9		tent					
9. Overall, how well did the LPN progra of 1 to 10, where 1 means <i>Not at All a</i>	ım prepare	you for th	e LPN posit								
1 2 3 4	5	6	7 8	9		0 e mely					
Not at All 1 2 3 4	5	7 7	8	9	1	/ell					
Please explain the rating you provide 11. What are some work-related challengers				vhile work	ing as an	I PN?					
☐ I am not working as an LPN (Skip to C		ou Have ell	Countered v	VIIIIG WOLK	as all	LIN:					

15. Please explain what made finding a job easy or difficult. 16. What specific suggestions do you have for improving the job placement process? JOB SATISFACTION This section of the survey asks about your satisfaction with your current job.		job.	our LPN	<u>you</u> for yo	orepare	ve better	could ha	program <u>(</u>	how the p	lescribe l	12. Please de
JOB PLACEMENT This section of the survey asks about finding a job as an LPN after completing the program? 14. Was it easy or difficult to find a job after you graduated from the LPN program? Very Easy Somewhat Easy Not Easy or Difficult Somewhat Difficult Difficult Somewhat Di											
JOB PLACEMENT This section of the survey asks about finding a job as an LPN after completing the program? 14. Was it easy or difficult to find a job after you graduated from the LPN program? Very Easy Somewhat Easy Not Easy or Difficult Somewhat Difficult Difficult 15. Please explain what made finding a job easy or difficult. 15. Please explain what made finding a job easy or difficult. 16. What specific suggestions do you have for improving the job placement process? JOB SATISFACTION This section of the survey asks about your satisfaction with your current job.											
This section of the survey asks about finding a job as an LPN after completing the program? 14. Was it easy or difficult to find a job after you graduated from the LPN program? Very Easy Somewhat Easy Not Easy or Difficult Somewhat Difficult Difficult Somewhat Difficult Somewh			•	program?	the LPI	rengthen	end to st	recommo	ould you	anges w	13. What cha
This section of the survey asks about finding a job as an LPN after completing the program? 14. Was it easy or difficult to find a job after you graduated from the LPN program? Very Easy Somewhat Easy Not Easy or Difficult Somewhat Difficult Diffi of the program of the program of the program of the program of the program. 15. Please explain what made finding a job easy or difficult. 16. What specific suggestions do you have for improving the job placement process? 17. Please explain what made finding a job easy or difficult. 18. What specific suggestions do you have for improving the job placement process? 19. Difficult Somewhat Difficult Difficult of the program of											
This section of the survey asks about finding a job as an LPN after completing the program? 14. Was it easy or difficult to find a job after you graduated from the LPN program? Very Easy Somewhat Easy Not Easy or Difficult Somewhat Difficult Difficult Somewhat Difficult Somewh											
This section of the survey asks about finding a job as an LPN after completing the program? 14. Was it easy or difficult to find a job after you graduated from the LPN program? Very Easy Somewhat Easy Not Easy or Difficult Somewhat Difficult Difficult Somewhat Difficult Somewh										NT	IOR PLACEMEN
Very Easy 1		e program	oleting the	after comp	an LP	ng a job a	bout findi	ey asks a	of the surve		
15. Please explain what made finding a job easy or difficult. 16. What specific suggestions do you have for improving the job placement process? 10B SATISFACTION This section of the survey asks about your satisfaction with your current job.		?	rogram?	the LPN pi	ed fror	u gradua	after yo	find a jok	ifficult to	asy or di	l4. Was it ea
15. Please explain what made finding a job easy or difficult. 16. What specific suggestions do you have for improving the job placement process? 10B SATISFACTION This section of the survey asks about your satisfaction with your current job.	cult	Diffi	Difficult	mewhat D	cult	asy or Dif	Not E	hat Easy	Somewh	sy	Very Easy
16. What specific suggestions do you have for improving the job placement process? IOB SATISFACTION This section of the survey asks about your satisfaction with your current job.		5		4		3			2		1
OB SATISFACTION This section of the survey asks about your satisfaction with your current job.											
OB SATISFACTION This section of the survey asks about your satisfaction with your current job.											
This section of the survey asks about your satisfaction with your current job.		ss?	nt proces	placemen	g the jo	improvin	have for	s do you	ggestion	ecific su	6. What spe
This section of the survey asks about your satisfaction with your current job.											
This section of the survey asks about your satisfaction with your current job.											
This section of the survey asks about your satisfaction with your current job.											
This section of the survey asks about your satisfaction with your current job.			-	_	-	-	-		-	CTION	OR SATISFAC
		ob.	current jo	with your	tisfacti	out your s	asks abo	the survey	ection of t		05 07(11017(0
17. Overall, how satisfied are you with your current job? Please rate on a scale of 1 to 10, we means Not Satisfied at All and 10 means Extremely Satisfied. Please check the appropriate						•	-	•			·
						- /					
	10 emely		9	8	7	6	5	4	3	2	
	isfied	Sati	, <u> </u>	, <u> </u>				ا. ا	ا ٍ ا		

FUTURE PLANS This section of the survey asks about volume 19. Since you applied to train to become an LPN, he life? Please tell us how much you agree with the	ow has this	s prograi	m made a	difference	in your
Since completing the LPN program,	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
a. I feel more professional fulfillment					
b. I am more financially stable					
c. My family is more secure					
d. I am making a significant contribution to society					
e. I feel more positive about the future.					
f. I am now on a promising career ladder in the health care industry					
g. I am proud of what I have achieved.					
h. I am more confident in my abilities as a health care provider.					
20. What are your career plans for 5 years from now	ı?				
21. Do you plan to get an RN degree in the future? 1 Yes 2 No 3 I am currently enrolled in an RN program					

22. What borough do you live in? (Please mark one)

₁∐Bronx ₄L	Queens	
₂ Brooklyn ₅	Staten Island	
₃ Manhattan 7	I don't live in New York City. (Please specify city/state:)
_		•
What is your age? (Please mar	rk one)	
₁ 17-19 years	₄□31-39 years	
<i>*</i>		
₃ 26-30 years	6 Over 50 years old	
_ ,	<u> </u>	
What is your gender? (Please n	nark one)	
₁ Male ₂ Female		
What is your race/ethnicity? (PI	ease mark one)	
₁ Asian or Pacific Islander	₄ White, non-Hispanic	
₂ Black, non-Hispanic	5 Multiracial	
= '	Other (please specify race/ethnicity:)
	· · · · · · · · · · · · · · · · · · ·	,
How many dependents do vou	have? Dependents are all the individuals that rely on you for	
	•	
<u> </u>	, 3	
₁ <u></u> 1	4 4	
2 2	₅∏5 or more	
	Brooklyn 3	2 Brooklyn

Thank you very much for completing this survey. Your feedback will help CEO improve the LPN program for others. Please complete your contact information below so that we may mail you the \$30 gift card.

NAME (PRINT):			
STREET ADDRESS			APARTMENT
CITY	STATE	ZIP CODE	

July 2010

CEO Nursing Career Ladder RN Program: Interim Evaluation

SUBMITTED TO:

NEW YORK CITY CENTER FOR ECONOMIC OPPORTUNITY



90 Broad Street Suite 1200 New York, New York 10004 212-425-8833 www.metisassociates.com metis associates

Foreword

The Center for Economic Opportunity (CEO) is committed to evaluating its programs and policies and has contracted with Westat and Metis Associates in order to inform decision-making within CEO and the sponsoring agencies. This report summarizes mid-term activities and findings for the evaluation of the Nursing Career Ladder RN Program, funded by CEO and operated by the Health and Hospitals Corporation (HHC). The principal authors of this report are Susanne Harnett and Marisol Cunnington from Metis Associates. Additional authors include Stanley Schneider and Elizabeth Lazarus of Metis Associates and Tina Winters of Westat.

We would like to acknowledge the staff of the HHC Nursing Career Ladder Program, including La'Shawn Williams, Program Director; Margaret Cohen, Director of Workforce Development; Ingrid Olsen, Counselor; and Nancy Cohen, Assistant Vice President of Human Resources, for collaborating with the Metis evaluation team on all aspects of the study. We would also like to thank Kristin Morse, Director of Evaluation, and Kate Dempsey, Senior Advisor, at the Center for Economic Opportunity for their collaboration and guidance.

Special thanks are also extended to Nursing Career Ladder Program participants, as well as to the staff at the Lehman College Continuing Education Department and the New York City College of Technology for their support of data collection efforts. We are especially grateful to the program participants who generously gave us their time during focus groups.



53 BROADWAY, 14TH FLOOF NEW YORK, N.Y. 10007

www.nyc.gov/ceo

2010 CEO Response to CEO Nursing Career Ladder RN Program: Interim Evaluation

The CEO Nursing Career Ladder RN Program was originally designed to support students with income below 130 percent of the federal poverty line through pre-clinical courses at CUNY and then clinical courses at Long Island University to the completion of a Bachelor of Science in Nursing. Upon earning their RN licensure, participants commit to working for four years at an HHC hospital.

The program reached its mid-point in the fall of 2009 when the first cohort of students entered the clinical phase of the program. CEO and HHC observed that retention of students through the preclinical phase had been low (51 percent retained at that time) and stopped recruitment into preclinical classes to focus on assessing students' performance through the clinical phase. To inform its assessment, CEO asked evaluators to review the implementation and mid-term outputs and provide context on nurse training programs in NYC and nationwide. The model was designed to support HHC and lift participants out of poverty, and evaluators were asked to see if the program was on track to achieve those goals.

Their findings demonstrated that the original model had benefits but needed revision, as CEO and HHC had observed. Whereas the program was reaching the low-income, diverse population it was designed to reach, it is expensive. Metis's analysis showed that program costs-per-participant and per-completer were high. This is partially because retention through the pre-clinical phase was low. In addition, there are aspects of the model – such as partnership with a private institution – that may inflate tuition costs above what they might be elsewhere.

However, the program context is also an important consideration when weighing the program's efficacy. The partnership with LIU has expanded the number of seats in RN education in a way that perhaps may not have been possible at other institutions, which is important if demand for RNs will be high in the coming years. However, there are indications that hiring for RNs may be slowing, perhaps temporarily, in the near future as experienced nurses wait longer before retiring and economic challenges slow new hiring.

As the RN pilot at LIU nears completion CEO is analyzing this and other similar programs to determine how best to incorporate lessons learned into the next generation of innovative health care workforce development strategies. As data from the RN program is compiled CEO will learn more about the costs and benefits of this model versus other approaches. It is a rapidly growing field with labor market trends that shift even more rapidly. The Metis Program Review provides an important overview of program implementation and the context in which the program operates.

Kate Dempsey Director of Budget and Operations Carson Hicks, Ph.D. Director of Programs and Evaluation

Table of Contents

I. Introduction.	1
II. CEO Nursing Career Ladder RN Program Description.	2
Background.	2
Program Design	2
Program Goals	2
Target Population	3
Resources	3
Activities	4
Staffing	6
Facility6	5
Outputs	5
Logic Model	7
Outcomes	3
III. Findings based on Mid-Term Evaluation Activities	9
Participants9	9
Participant Feedback 1	2
Retention Rates and Factors Associated With Attrition	3
Implementation Challenges	5
Current CEO Nursing Career Ladder RN Program Costs	6
Data Availability and Evaluation Feasibility1	8
IV. Conclusions and Recommendations from the Program Review	9
V. The Registered Nursing Field: Context for the Nursing Career Ladder RN Program 2	1
Nursing Shortage: Causes and Correlates	2
Overview of RN Education in the United States	:3
NYC RN Training Programs2	4
RN Nursing Training Initiatives and Supports	0
Conclusion	5
Appendix A. CEO Nursing Career Ladder RN Program Context/Literature Review Interviews	
Appendix B. National and NYC-Specific Nursing Data Tables	
Appendix C: Local, State, and National RN Nursing Training Initiatives	

I. Introduction

The Center for Economic Opportunity (CEO) has funded approximately 40 initiatives across some 20 sponsoring agencies aimed at reducing the number of working poor, young adults, and children living in poverty in New York City (NYC). CEO is committed to evaluating its programs. The purposes of the evaluations are to collect and to report data on the implementation, progress, and outcomes of programs in the CEO initiative, and to inform policy and program decision-making within CEO and the agencies that sponsor the programs.

In spring 2009, CEO requested that Westat and Metis provide a mid-term review of the four-year Nursing Career Ladder (Registered Nurse) RN Program, which was launched in 2007. The purposes of this review were to provide a clear understanding of the context in which the program was developed and operates; to describe how the program is structured and implemented (represented visually by a logic model); to outline the costs associated with its implementation; to gather preliminary information regarding program outcomes; and to make recommendations about the program model, as well as further evaluation activities.

Evaluation activities conducted as part of this mid-term review of the program included: a review of program documentation, interviews with key CEO and program staff, and three focus groups with program participants from multiple program sites. Activities conducted to inform the program context and cost study components included literature searches and interviews with experts in the nursing field, such as the leaders of national and statewide nursing organizations and academic scholars studying nursing labor markets. The CUNY Dean for Health and Human Services was interviewed to obtain information specifically about CUNY nursing programs and students, and a representative of the 1199 SEIU union provided information about the union's RN tuition assistance programs. To learn more about an innovative new dual degree nursing training model, evaluators also interviewed a leader of the Oregon Consortium for Nursing Education (OCNE), a demonstration RN training model designed to inform the broader nursing field. Information on all interviews completed for this report is summarized in Appendix B.

The following information is provided in this report:

- A written description of the CEO Nursing Career Ladder RN Program, which includes information about the program goals; the target population; resources; activities; outputs; and key short-term, mid-term, and long-term outcomes. Information on program staffing is also included in this section. A logic model for the program is included in Appendix A.
- Key observations and findings resulting from mid-term evaluation activities, including student characteristics and attrition data, as well as an analysis of current program costs.
- Overall conclusions, based on mid-term program evaluation findings and research on the nursing field, and suggestions for evaluation options.
- A description of the context within which the CEO Nursing Career Ladder RN Program is situated, including a summary of the broader RN nursing field and pathways to the RN credential both in NYC and across the U.S.

II. CEO Nursing Career Ladder RN Program Description

Background

The nursing field has faced a shortage of trained RNs for decades, and this shortage is projected by experts to continue for many years to come. As is the case elsewhere in the country, clinical nurse training programs in NYC are oversubscribed. NYC nursing programs struggle with insufficient numbers of teaching staff and inadequate facilities to train enough nurses to meet the city's needs. The CEO Nursing Career Ladder RN Program was designed with knowledge of the NYC nursing field context in mind. It aims to address both the nursing shortage and the needs of individuals living in poverty in NYC by preparing low-income individuals to work as RNs at hospitals operated by the Health and Hospitals Corporation (HHC).

The following section details the program's design, goals, target population, staffing, activities and resources. Also included is a discussion of findings and recommendations based on midterm evaluation activities, such as focus groups, analyses of participant data, and an analysis of current and projected program costs.

Program Design

Operated by the HHC, the Nursing Career Ladder RN Program is a 128 credit bachelor's degree program designed to support low-income and minority NYC residents through the completion of a Bachelor of Science in Nursing (BSN) degree. Participants complete a rigorous program of coursework, including 64 pre-clinical course credits at the City University of New York (CUNY) or Long Island University (LIU), and 64 course credits and hands-on trainings through the LIU School of Nursing at the newly renovated Kings County Hospital in Brooklyn. In return for the financial, academic, and social supports provided by the program, participants commit to work for four years in an HHC hospital facility.

Program Goals

The principal goal of the Nursing Career Ladder RN Program is to develop sustainable career prospects for low-income individuals. The program supports participants through a clinical nursing degree program, at the end of which they receive a BSN degree and are eligible to sit for the RN licensure examination. Upon passing the exam, participants are guaranteed a position as an RN at an HHC hospital, which currently offers a starting salary of \$61,528 and will hold a BSN degree, which many experts in the field argue is the most valuable degree to have. Program graduates thus earn a baccalaureate degree in a field that is projected to experience increasing labor demand and wage growth in the coming decades. At the same time, the CEO Nursing Career Ladder RN Program is also designed to address the nursing shortage in NYC by providing degreed and licensed RNs to fill positions at HHC hospital facilities throughout the city. The program specifically seeks to enroll nurses from racial and ethnic minority backgrounds to ensure that hospitals are staffed with nurses who represent the cultural and linguistic diversity of the communities they serve.

Target Population

The primary target population for the Nursing Career Ladder RN Program is NYC residents currently living at or below 130% of the federal poverty level. HHC staff began recruiting income-eligible participants for the program in March 2007. They worked with a variety of organizations throughout the city to identify eligible participants, including the NYC Department of Education (NYC DOE), large community based organizations (CBOs), and local churches. Furthermore, in order to ensure representation of all racial, ethnic, and linguistic minority groups served by HHC hospitals throughout NYC, the program actively targeted racial and ethnic minorities by reaching out to community groups such as the Chinese American Council and to Spanish-speaking communities throughout NYC.

Students recruited into the program consisted of college freshmen and individuals already enrolled in CUNY and LIU. Some were transfer students who had completed various hours of pre-clinical credits and entered the program to complete their degrees as CEO Nursing Career Ladder participants. Thus they were provided tuition, books, and other supports through completion of the BSN in exchange for their commitment to work as an RN at HHC.

In addition to meeting income eligibility requirements, program participants must meet academic qualification requirements. In order to be accepted into the Nursing Career Ladder RN Program, students must possess a high school diploma or GED. All participants also must pass the CUNY Skills Assessment entrance exams in reading, writing, and mathematics prior to beginning coursework in the pre-clinical phase of the program. During the pre-clinical phase of the program, students must maintain a 3.0 cumulative GPA in all required coursework. In order to advance to the clinical phase of the program, students must pass the HESI-A2 LIU entrance examination required of all entering clinical nursing students. Thus, the program seeks to recruit and screen applicants with the academic qualifications and skills that will enable them to proceed successfully through the increasingly challenging steps of the program.

Resources

Funded through CEO, in FY09 the operation of the Nursing Career Ladder RN Program was supported by a budget of \$677,375. In FY10 the program is being supported by a budget of approximately \$600,000. In FY 10, more than \$425,000 of these funds are supporting direct program costs, such as tuition and other participant costs, while another \$175,000 is supporting the program at HHC. The CEO Nursing Career Ladder RN Program funding is used to pay the portion of student tuition costs that is not covered through financial aid received from federal, state, and university sources. Current estimates project that tuition expenses will increase as more students enter the clinical portion of the program.

In addition to tuition and fee support throughout their enrollment in the program, participants also receive free textbooks for all courses. Furthermore, they benefit from all of the supports and services available on the university campuses including, among others, tutoring and advising services. LIU also will provide exam preparation services as students prepare for the RN licensing exam, the NCLEX-RN.

HHC program staff provides program oversight, counseling, and administrative services throughout all phases of the program, from the recruitment and applicant-review phase, through the pre-clinical and clinical phases, including job readiness supports for clinical program students. HHC also will connect program graduates with workplace support programs offered to alumni through the CUNY and LIU nursing programs. HHC staff provide CEO RN students with program information; monitor their attendance and academic progress; and offer them direct counseling, as well as referrals to outside providers as necessary. Furthermore, HHC provides qualifying participants with access to social service benefits, including welfare benefits and healthcare. CEO Nursing Career Ladder RN Program staff has partnered with the NYC Human Resources Administration (HRA) to streamline the benefits application process for the program's participants; staff now provide student documentation directly to HRA to reduce the paperwork burden on students seeking public benefits such as cash assistance, food stamps, and Medicaid. As participants progress through the program, HHC coordinates exam preparation services for them, including assistance with the CUNY entrance exams, the HESI-A2 (required by LIU as they move from the pre-clinical to clinical phases) and the NCLEX RN licensure exam (preparation for which is provided through the LIU School of Nursing).

In 2009, HHC supplemented the support that they are able to provide to the program participants through the receipt of a grant from the Health Resources and Services Administration (HRSA). Funds from this grant are used to provide support services for students in the clinical portion of the program in an effort to maximize retention and successful program completion. The grant enables HHC to provide students with a stipend of \$250 per month, along with 15 hours of training sessions intended to prepare students to succeed in the clinical program. Led by the Assistant Dean of the LIU School of Nursing, the sessions cover topics such as time management, study skills, and professionalism in the workplace.

Activities

HHC Nursing Career Ladder RN Program staff recruit and screen applicants for eligibility and commitment to the program requirements, including a four-year HHC hospital work commitment. Income is verified through HHC reviews of income documentation such as tax returns and paycheck stubs. As indicated earlier, all applicants are asked to review and sign a written commitment to work for four years in an HHC hospital after completing the program. Once accepted into the program, all participants receive ongoing communications via email and telephone from HHC program staff regarding all aspects of program requirements, deadlines, and available supports.

After students successfully complete the CUNY entrance exam, which includes assessments of their reading, writing, and math skills, they begin the pre-clinical phase of the program. Currently, students are enrolled at the following CUNY campuses: Borough of Manhattan Community College, Kingsborough College, LaGuardia Community College, Lehman College, Medgar Evers College, NYC College of Technology, and Queensborough Community College. Additionally, a small number of students are enrolled in the pre-clinical program at LIU. Through the end of the 2008-2009 academic year, participants attending Lehman College and NYC College of Technology received additional support services from campus staff members through a cohort model program.

As part of the program, the cohort model provided students with additional supports and peer collaboration through small, separate classes; additional academic supports and counseling services; and facilitation with class registrations. This model guaranteed cohort students access to pre-clinical courses, some of which they may have had difficulty enrolling in without the provision of separate courses. The cohort model has been discontinued for all remaining pre-clinical students due to budget restrictions; however, students will continue to benefit from other campus-provided academic supports.

For all RN Nursing students, pre-clinical courses include general education requirements for the BSN degree, such as courses in English, mathematics, and social science, in addition to biology and chemistry courses intended to prepare students for clinical nursing courses. Students may progress through the pre-clinical phase at different rates, depending upon the number of transferable college credits with which they enter the program; some students enter with bachelor of arts degrees and need only to complete the science pre-requisites prior to entering the clinical phase of the program. Some students attend school full time during the pre-clinical program phase, while others must attend part time given their outside responsibilities. Upon completing the 64 course credits of pre-clinical coursework, either through coursework or through transfer credits, students are prepared to take the HESI-A2 entrance examination through a preparation program facilitated through HHC. In August 2009, 73.3 percent of the first cohort of students completing the pre-clinical phase coursework (22 out of 30) passed the HESI-A2 assessment. The eight who did not pass either studied and re-took the exam to join a later cohort or left the program. Of those who passed, twenty entered the clinical phase of the program in fall 2009 and the remaining two left the program.

During the clinical phase, students complete clinical coursework and *practica* at Kings County Hospital in Brooklyn through the LIU nursing program. LIU provides students with advising support and monitors their attendance and academic progress throughout the two-year clinical program. Students receive hands-on nursing experience at hospitals during the clinical program. They are also provided with supports from HHC, such as training sessions on workplace behavior and relationship-building skills. As noted above, these trainings are provided through a HRSA grant-funded program designed to maximize student retention. HHC set forth the goal to retain 80% of the students through the end of the first semester, thereby improving on the overall average LIU clinical nursing student first to second semester retention rate of 66%.¹

Upon finishing the 64-credit clinical program, including successfully completing a college exit examination, students will graduate from LIU with a BSN degree and subsequently attend a workshop in preparation for the RN licensure examination, the NCLEX-RN. Although Nursing Career Ladder RN Program participants have not yet made it to this step of the program, historical data from LIU indicate that most program graduates pass the exam on their first or second attempt; in fact in 2007 93 percent did so.

After passing the exam, students will be offered a position at an HHC hospital facility. Students may request a position at a specific HHC hospital, but must complete the four-year work

-

¹ Preliminary data are available on retention rates to date for RN Nursing program Cohorts 1 and 2. See Retention Rates sub-section in Preliminary Findings section below for more information on these results.

commitment in order to avoid having to reimburse HHC for the cost of the four-year Nursing Career Ladder RN Program.² If an appropriate position is unavailable in an HHC hospital, graduates will be permitted to seek employment elsewhere.

Staffing

Staffing for the CEO Nursing Career Ladder RN program includes a full-time program director, an HHC employee who spends 100% of her time managing the RN program, as well as a parallel CEO program to prepare Licensed Practical Nurses (LPN). A full-time case manager, funded through a Health Resources and Services Administration (HRSA) grant, provides support services for clinical program students. She works four days a week on-site at LIU and one day at the HHC office. The program also employs two full-time counselors, also HHC employees, who provide counseling and referrals to students in both the RN and LPN programs. They each divide their time equally between the two programs. Furthermore, an office manager provides administrative support to RN and LPN programs, including screening calls, distributing information to potential applicants, responding to inquiries, and maintaining a waitlist for the programs.

Other HHC staff members also provide support to the program, including the Director of Workforce Development and the Assistant Vice President of Human Resources. Both staff members work closely with the program director, providing oversight and advisement on a regular basis.

Facility

HHC paid approximately \$7.5 million to renovate one floor of Kings County Hospital in Brooklyn. LIU is leasing the space from HHC for ten years and paying an annual rent of approximately \$450,000. The facility creates new capacity for 120 students (30 per cohort). As part of the lease agreement, HHC has the right to designate all 120 students provided they meet LIU eligibility requirements. Any seats not filled by HHC/CEO will be filled by LIU.

Outputs

This section describes measurable outputs that could result from the activities and inputs outlined in the CEO Nursing Career Ladder RN Program logic model displayed below. Data are not yet available on all outputs, hence some are not described in this report but could be measured in the future. As outlined in the Data Availability and Evaluation Options section below, some outputs data are currently collected by program staff while data on other outputs may need to be added to data collection systems.

² Students sign a forgivable loan agreement in the fourth year of the program. If they default in this final year of the program or if they do not fulfill the four-year work commitment they could be held responsible for program expenses.

RN Nursing Career Ladder Logic Model

Goals		Target Population
To assist low-income individuals by enabling them to earn a baccalaureate degree in a field that is projected to offer good wages and future growth To provide qualified and needed candidates to fill Registered Nurse positions at HHC hospitals, to help New York City address the projected	•	Low-income NewYorkers; eligibility is based on federal povert guidelines (below 130% of FPL) Members of racial/ ethnic minority groups who mirror the racial and linguistic composition of HHC patient communities Academic qualifications High school diploma Participants
	ı	1

nurse shortage pass the · To ensure that CUNY nurses reflect entrance the exam of communities reading, they serve in their language abilities and and racial/ethnic group membership

- income orkers: ility is d poverty lines v 130%
- ers of ethnic ity s who the and stic osition of patient unities
- emic ications:
- sh school loma
- ticipants writing, and math skills knowledge prior to the preclinical portion of the program
- Agree to four year postprogram HHC work commitment

Resources

- · CEO funding of approx. \$600K per year, plus \$7.5M capital investment in renovations
- HHC administration and oversight, including:
- -Student recruitment
- -Monitoring attendance and academic progress -Facilitating public benefits enrollment for
- eligible students -Providing counseling and referrals
- -Coordination with **HHC** Corporate Nursing Dept.
- regarding placement of RNs
- Campus facilities/services:
 - -Coursework
 - -Clinical work
 - -Tutoring
 - -Academic counseling
- · Financial aid from federal and state sources, as well as from universities
- Free books and payment of fees
- Hospital/training facilities
- Preparatory programs to assist with entrance exams

Activities

Recruitment and Screening

- · Recruited through partnerships with local organizations
- · Screened for income and academic qualifications
- Prepare for and pass CUNY entrance exam
- Sign work commitment pledge

Pre-Clinical Phase

- Enter pre-clinical phase with varying amounts of credits
- Participate in a total of 64 credits of pre-clinical courses, which include both Liberal Art and Science courses, at CUNY or LIU campuses
- Maintain at least a 3.0 GPA
- Some will receive Associate's Degrees
- Pass the HESI-A2 exam in order to move into the clinical phase

Clinical Phase

- Sign forgivable loan indicating that they will work for HHC for 4 years
- Participate in at total of 64 clinical courses in nursing
- Maintain at least a 2.5 GPA
- Receive hands-on nursing experience in hospitals
- Participate in job training to orient students to world of nursing
- · Receive BSN
- Pass the NCLEX exam in order to attain RN licensure

Post-Clinical Phase

• Fulfill 4 yr commitment to HHC

Outputs

- N of applicants each semester/year
- N/% of students who meet federal poverty guidelines
- N /% of students screened for commitment
- N /% of students who sign work commitment pledge
- N/% of applicants who pass the CUNY entrance exam
- N/% applicants representative of minority groups
- N languages spoken other than English
- Student attendance rate in pre-clinical coursework
- N/% of students in good academic standing in preclinical phase (GPA >= 3.0)
- N/% of students who receive social and other support services
- N/% of students who complete 64 pre-clinical credits
- N/% of students who pass HESI-A2 LIU exam
- Attendance rate in clinical phase
- N/% of students in good academic standing in clinical phase (GPA >= 2.5)
- N/% of students who complete 64 clinical credits and graduate with **BSN**
- N/% of students who pass the RN licensure exam (NCLEX-RN)
- N/% of graduates who take jobs at HHC

Short-Term Outcomes

and gaining

the LIU

program

· The number of

RN nursing

increased

admittance to

clinical nursing

program spaces

in NYC will be

- Students will • Students will progress progress successfully successfully through the pre-clinical program, with at least 20 students passing the HESI A2 exam each semester
 - be placed in HHC nursing positions each year
 - four-year work commitment at an HHC hospital

through the clinical program, earning BSN degrees and passing the NCLEX-RN licensing exam • At least 20 graduates will

Mid-term

Outcomes

• All graduates will complete a

• (

Context

- Approximately 350,000 individuals in New York Cit not earning enough to rise above poverty.
- Low-income students are less likely to complete a po education, placing them at greater risk of continued p bachelor's degree holders earn nearly double what hi graduates make, according to the U.S. Census Bureau
- The move toward managed care, prevention, and cos driving the need for nurses who are prepared to pract structured setting and interact directly with the public providing health and prevention services to the comm requires a BSN.
- · Nurses are in short supply and the shortage is expected this results in too much nurse overtime, which negati quality of care.

For the recruitment and screening phase of the program, measurable outputs include application numbers and the number and percentage of applicants eligible for the program based on federal poverty guidelines. Number and percentage of applicants representative of minority groups and languages spoken other than English is also important to track. Another useful measure of program recruitment efforts is the proportion of applicants screened for and willing to sign a written commitment to work for an HHC hospital facility for at least four years after completing the CEO Nursing Career Ladder RN Program. The final measure of the recruitment and screening phase is eligible applicants' passing rates on the CUNY entrance exams.

During the pre-clinical phase of the program, measurable outputs include student attendance rates and academic performance levels in all coursework, up to and including completion of the 64-unit pre-clinical program; program performance data also include numbers and percentages of students maintaining the cumulative 3.0 GPA required by HHC for progression to the clinical phase. Another measure of pre-clinical student success is the passing rate on the HESI-A2 LIU School of Nursing entrance examination, along with the percentage of students who complete the pre-clinical phase and, of these, the percentage of students who progress to the clinical phase.

Outputs providing measures of success during the professional phase of the program include the proportion of students completing the clinical coursework phase, and those doing so with a cumulative GPA of at least 2.5 and a grade of C+ or better in all nursing courses. Another measurable output is the rate at which students pass the RN licensure exam. Beyond this, the final key output indicative of overall program success is the proportion of graduates who complete the commitment to work for at least four years in an HHC hospital.

Outcomes

Below are possible outcomes outlined in the CEO Nursing Career Ladder RN Program logic model (displayed in Appendix A) that could be measured to assess program results; data are not yet available on these outcomes, but could be collected as program implementation continues.

Short-term outcomes for the program include the completion of all pre-clinical coursework at a CUNY campus or through the LIU School of Nursing, and the successful completion of the HESI-A2 assessment to qualify for the clinical phase of the program. The first cohort of 20 students entered the clinical program phase in fall 2009 and subsequent cohorts of 20 students each are to enter in each of the fall and spring semesters through the spring of 2011. The actual time that it takes to progress through the program will vary by student, based on transferable credits accumulated by students prior to entering the Nursing Career Ladder RN Program.

Another short-term outcome is to increase the number of RN nursing program spaces in NYC, due to the addition of spaces in the LIU nursing program for the CEO Nursing Career Ladder RN Program

Mid-term outcomes for participating students include the completion of all coursework and the resulting Bachelor of Science degree with a major in nursing. Based on current enrollments, it can be expected that the first cohort of 20 students to enter the clinical phase of the program will

complete all clinical coursework at the end of the spring 2011 semester.³ Table 1, below, shows potential numbers of CEO students who will be enrolled in the clinical program through fall of 2012. Note that each cohort has space for up to 30 students. Seats not filled by CEO will be filled by LIU. The table below does not account for some attrition.

Table 1. Projected CEO Clinical Program Enrollments by Semester

	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012
Cohort 1	20	20	20	20			
Cohort 2		20	20	20	20		
Cohort 3			20	20	20	20	
Cohort 4				20	20	20	20
Total	20	40	60	80	60	40	20

Long-term program outcomes are expected to begin approximately five years after the initial program implementation period. In the long term, the program aims to help individuals living at or below 130 percent of the poverty line to possess a BSN degree and RN licensure and earn a salary at least at the level of NYC starting nursing salaries. Also in the long term, the program aims to positively impact the overall supply of registered nurses in NYC and to increase the proportional representation of minorities among nurses in NYC. These goals will only be possible if the program is expanded and replicated in the long term.

Findings Based on Mid-Term Evaluation Activities III.

Overall, data gathered through mid-term evaluation activities indicate that CEO Nursing Career Ladder RN program activities have thus far been implemented as planned, although a few adjustments can be recommended based on identified challenges. The following sections present preliminary findings based on evaluation activities and documentation collected on the CEO Nursing Career Ladder RN program during the spring, summer, and fall of 2009. Recommendations follow.

Participants

During interviews, staff reported meeting with a number of challenges in finding candidates who met all of the admission requirements; however, as noted above, they were able to meet their goal participation levels by targeting a wide variety of community organizations and agencies. As is the case in many programs, word-of-mouth was an important recruitment tool. Additionally, staff efforts to recruit eligible applicants for the program were combined with those used to recruit applicants for the LPN program. Staff members currently are not actively recruiting new students, as the program will be fully enrolled through spring of 2011; however,

³ In spring 2011 six students completed their clinical coursework and received a BSN. Other students are re-taking courses they did not pass and have shifted to subsequent cohorts.

they do continue to receive inquiries from, and maintain a wait list of interested individuals who learned about the program through social service and religious organizations.⁴

Table 2 displays the most recently available demographic data for the students who are enrolled in the program. As shown in the table, the large majority of participants in the CEO Nursing Career Ladder RN Program are female, and over half are between the ages of 25 and 44 while another two-fifths are between the ages of 18 and 24. Participants come from all five boroughs of the city, though the majority (74.4%) of the students are located in Brooklyn and the Bronx. Sixteen percent speak a language in addition to English. All students are members of minority groups, with the possible exception of one for whom ethnicity data are unavailable.

Table 2. Demographic Data (N=74)

Characteristics		lents
Gender	N	%
Females	69	93.2%
Males	5	6.8%
Age	N	%
18-20 years	14	18.9%
21-24 years	17	23.0%
25-44 years	38	51.4%
45-61 years	5	6.8%
Ethnicity	N	%
African American-US	41	55.4%
Afro-Caribbean	21	28.4%
Asian	3	4.1%
Hispanic	7	9.5%
White	0	0.0%
Middle Eastern	1	1.4%
Missing	1	1.4%
Languages ⁵	N	%
English	74	100%
Spanish	5	6.8%
Mandarin	2	2.7%
Creole	4	5.4%
French	1	1.4%
Ibo	1	1.4%
Urdu	1	1.4%
Borough of Residence	N	%
Manhattan	8	10.8%
Bronx	15	20.3%
Brooklyn	40	54.1%
Queens	10	13.5%
Staten Island	1	1.4%

_

⁴ If the numbers of students on the waiting list are sufficient, this group should be considered as a possibility for use in a comparative study.

⁵ Table has duplication. All students speak English. One student speaks Spanish and Mandarin and one student speaks French and Creole. They are counted in both categories.

The data in Table 3, below, suggest that the program is serving low-income participants as intended, given that at program entry 12.2 percent were receiving public assistance, almost one-third were unemployed, and two-thirds of those who were employed earned just \$5,000 to \$15,000 per year. While just over half of the participants have no dependents, over a third have between one and three dependents, and approximately seven percent of the participants have four or more dependents.

Table 3. Household and Income Data (N=74)

Characteristics	Stu	idents
Dependents	N	%
Zero	38	51.4%
One	9	12.2%
Two	7	9.5%
Three	12	16.2%
Four	3	4.1%
Six	2	2.7%
Wage breakdown at program entry/ annual salary	N	%
\$0	23	31.1%
\$1-5,000	2	2.7%
\$5,001-10,000	14	18.9%
\$10,001 - \$15,000	20	27.0%
\$15,001- \$20,000	7	9.5%
\$ 20,001 - \$25,000	7	9.5%
More than \$25,000	1	1.4%
Public Assistance	N	%
Receiving Public Assistance	9	12.2%
Not Receiving Public Assistance	65	87.8%

As shown in Table 4, below, the majority of students entered the program with at least some college coursework credits or an associate's degree. A small proportion (less than 3%) of current program participants entered the program possessing only a GED, and almost 14 percent entered the program already holding a bachelor's degree in another academic discipline. Over a quarter of the current students entered the CEO Nursing Career Ladder RN training program having worked previously in the health care field, while the majority of students had worked in other occupations, including sales and administrative positions.

Table 4. Prior Education and Work Experience (N=74)

Characteristics		Students
Education level	N	%
GED	2	2.7%
High School Diploma	14	18.9%
Associate's	14	18.9%
Some College	34	45.9%
Bachelor's	10	13.5%
Master's	0	0.0%
Missing	0	0.0%
Previous Employment	N	%
Admin.	7	9.5%
Banking	1	1.4%
Health Care	21	28.4%
Other	27	36.5%
Sales	5	6.8%
NA	1	1.4%
Missing	12	16.2%

Participant Feedback

Focus groups were held with students in the pre-clinical phase to assess students' perceptions of the program. Six students participated in a group held at Lehman College; five students attended a group held at NYC College of Technology; and two students attended a final group held at the HHC offices. All participants signed a consent form explaining that results would only be reported in the aggregate and anonymously.

Students who participated in focus groups were very enthusiastic about the program, in addition to being optimistic about their future career trajectories and earning potential because of the opportunity that the program has provided to them. Many participants indicated that they had always aspired to become an RN. Some had investigated RN training opportunities and became concerned about the barriers posed by the oversubscription of RN degree programs and by the high cost of earning the degree. Thus, they were very pleased to learn about the opportunities offered by the CEO Nursing Career Ladder RN Program.

Students reported that the financial support for tuition, fees, and books is an invaluable part of the program, and the most important source of support that they receive. They also find the counseling services provided through HHC to be helpful, particularly given the responsiveness of the counselors. These findings indicate that the supports provided by the CEO Nursing Career Ladder Program are an invaluable part of the program. This is not surprising given the research that documents that individuals living in poverty are more often challenged by a lack of family supports, adequate and stable housing, and other supports that may be necessary to put in the hard work necessary to earn a college degree (Bailey, Jenkins, & Leinbach, 2005). In some sites, including those formerly utilizing the cohort model, some students described the social support they receive from each other as crucial to their success; while in other sites students did not know or interact regularly with other program participants. Evidence suggests that the cohort

model was implemented differently at each of the two cohort model sites. For example, students took classes together regularly at one site, but not at the other. During focus groups, the students who participated at the site where the cohort model was implemented faithfully emphasized the importance of this model in their success in the program, whereas students who participated in the other site did not see the cohort model as an important factor in their success.

One commonality across all student experiences was the importance of the support of students' families and friends, which was often described as critical to their successful progress through the program. This was particularly true for students who had young children to care for, and for those who found they could not juggle work with their rigorous full-time pre-clinical coursework schedule.

Retention Rates and Factors Associated With Attrition

According to currently available HHC program participant data, as displayed in Table 5, a total of 145 students have enrolled in the Nursing Career Ladder RN program since its inception prior to the fall semester of 2007.⁶

Table 5. Student Enrollments By Program Semesters (N=145)

Semester	Accepted/Enrolled
Fall 2007	9
Spring 2008	41
Summer 2008	19
Fall 2008	43
Spring 2009	33
Summer 2009	0
Missing	0
Total	145

As shown in Table 6, below, a total of 71 of these students were no longer enrolled in the program as of fall 2009, resulting in an overall program retention rate of 51 percent.

Table 6. Attrition Rates By Program Semesters (N=71)

Semester	Terminated/Withdrew
Fall 2007	7
Spring 2008	30
Summer 2008	8
Fall 2008	8
Spring 2009	12
Summer 2009	0
Missing	6
Total	71

-

⁶ This figure represents all students who successfully completed the bridge program designed to provide remediation to enable students to meet the academic entry requirements of the CUNY schools. Those students who did not complete the bridge program and enter the pre-clinical program phase were not included in the total of ever enrolled students.

Therefore, in fall 2009 74 students remained in the program. Preliminary data on students continuing into the clinical portion of the program indicates that just over half of Cohort 1 students (11 of 20, or 55%) did not successfully complete the first clinical semester; however the large majority of Cohort 2 students (16 of 18, or 89%), who benefitted from the support of the HRSA-funded case manager starting from December 2009 on, successfully completed all first semester courses. It should be noted that Cohort 1 students remain enrolled in the LIU clinical program and will re-take the fall 2009 course they did not pass in fall 2010.

Table 7 below presents information on the characteristics of students who left the program during the pre-clinical phase, as well as of those who remain enrolled and will continue into the clinical phase of the program. Of the 71 students not completing the pre-clinical program, 52 did not meet program requirements necessary for continued enrollment, 13 left for personal reasons, and another six did not provide a reason for leaving. Among students who did not meet program requirements, the majority were terminated from the program due to failure to make sufficient academic progress or attain adequate GPAs in pre-clinical coursework.

Table 7. Characteristics of Program Leavers vs. Enrolled Students

Characteristics	Terminated/Wit	hdrew (N=71)	Enrolled as o	of Fall 2009 (N=74)
Age	N Leavers	% Leavers	N Enrolled	% Enrolled
18-20	16	53.3%	14	46.7%
21-24	11	39.3%	17	60.7%
25-44	34	47.2%	38	52.8%
45-61	7	58.3%	5	41.7%
62+	1	100.0%	0	0.0%
Missing	2	100.0%	0	0.0%
Education level	N Leavers	% Leavers	N Enrolled	% Enrolled
GED	5	71.4%	2	28.6%
High School Diploma	18	56.3%	14	43.8%
Associates	5	26.3%	14	73.7%
Some College	35	50.0%	34	50.0%
Bachelors	6	37.5%	10	62.5%
Masters	0	0.0%	0	0.00%
Missing	2	100.0%	0	0.0%
Enrollment Status	N Leavers	% Leavers	N Enrolled	% Enrolled
Full Time	34	45.3%	23	54.7%
Part Time	20	48.8%	19	51.2%
Missing	17	58.6%	13	41.4%

As shown in Table 7, above, over half (52.8%) of participants aged 25-44 and over 60% of those aged 21-24 continued in the program beyond the fall of 2009. While the majority of those with a college degree continued in the program (62.5% of bachelors degree holders and 73.7% of associates degree holders), the large majority (71.4%) of those with only a GED did not continue. Regardless of enrollment status, over half of students continued in the program beyond fall 2009.

To determine whether there are statistically significant differences between program leavers and currently enrolled students, two statistical tests were conducted. Using a continuous measure of the age variable for each group, a one-way analysis of variance (ANOVA) was conducted to

compare leavers and current students, the results of which were not statistically significant.⁷ Additionally, chi-square tests of independent samples were conducted to compare prior education and nursing program enrollment status of leavers with enrolled students. As shown in Table 8 below, a significantly greater number of currently enrolled students entered the program with a college degree, compared with program leavers. However, no significant differences between the leavers and enrolled students were found when their enrollment status (full-time or part-time) was compared.

Table 8. Statistical	Analyses of I	eavers vs	Enrolled	Students
i abic o. Statistical		July Cib vb.	Lintoncu	Diudchio

Degree Possession	Leavers	Enrolled
None	51 (82.3%)	44 (64.7%)
At least Associates Degree*	11 (17.7%)	24 (35.3%)
Nursing Program Enrollment Status	Leavers	Enrolled
Nursing Program Enrollment Status Full Time	Leavers 34 (63%)	Enrolled 41 (66.1%)

^{*}Denotes statistical significance at the p<0.05 level, based on a chi-square test of independent samples.

In summary, the only significant difference between the two groups is that a greater percentage of enrolled students than program leavers possess a college degree. It could be that those students who already possess an understanding of the challenges of college education are more likely to remain enrolled in a BSN program. However, it could also be that students entering the CEO Nursing Career Ladder RN program without a prior degree face greater personal challenges posing a barrier to degree completion, and thus may need more support services than those who were able to earn a prior degree.

Implementation Challenges

HHC program staff indicated that identifying eligible applicants for the program was a major challenge early in the implementation process. As mentioned earlier, they found it difficult to locate participants who met all of the eligibility criteria, including the financial and academic qualifications. However, through their partnerships with city organizations, they were ultimately able to meet their recruitment goals. In fact, they currently have eligible participants on a waiting list in the case that spaces become available in the future.

Staff also identified the four-year period necessary to complete the program as a challenge for participants. Though the earning potential of program graduates is clearly an incentive for participants, it is also true that many students—particularly older students who have dependents—struggle to meet their financial obligations while enrolled in the program. Thus, the long-term investment of four years of reduced income can pose a significant challenge to successful program completion.

 $^{^{7}}$ Based on a standard criterion of significance at the p<0.05 level of probability, results of the one-way ANOVA of age by enrollment status were not significant (p=0.12).

During focus groups, students echoed this concern as well. Several students explained that even with access to public benefits, their financial obligations pose a major challenge to their successful advancement through the program and many find it necessary to work part time while completing coursework. Many students also mentioned transportation as a challenge, citing long commutes and a lack of funds to cover public transportation costs as an additional source of stress. Several of the interviewed students speculated that students who dropped out of the program during the pre-clinical phase may have been unable to overcome the financial, personal, and other obstacles that affect many participants.

Students also expressed concern about the sequence of the classes and suggested that rigorous science classes might be best taken during the regular academic year, rather than over the summer when the timeline is condensed. They also expressed apprehension that the clinical phase may bring even more academic challenges in terms of rigorous academic coursework. While some expressed a desire for more preparation regarding what to expect academically during this next program phase, other students stated that the HHC counselors had explained the rigors of the clinical phase, and they thus felt well-prepared to meet any new challenges posed during their clinical training.

Current CEO Nursing Career Ladder RN Program Costs

The cost analysis table, displayed below, provides an estimate of the net *per participant* costs of the current program, including university tuition and fees and program administration costs. The analysis accounts for costs covered by financial aid and rental income paid to HHC by LIU for use of the renovated clinical training space.

Table 9. Estimated Costs for the Current CEO Nursing Career Ladder RN Program

BSN Degree (CUNY/LIU)					
Costs & Offsets	Pre-Clinical Portion of BSN Degree (CUNY) 2 Years	Clinical Portion of BSN Degree (LIU) 2 Years	Total (All 4 years)		
Tuition, Fees, & Books	\$9,600	\$59,935	\$69,535		
HHC Program Staff Costs	\$3,365	\$3,365	\$6,730		
Clinical Program Retention Support Services		\$6,250	\$6,250		
Less Financial Aid (40% LIU/ 25% CUNY)	(\$2,000)	(\$21,862)	(\$23,862)		
Less LIU Rental Income		(\$18,036)	(\$18,036)		
Per Participant	\$10,965	\$29,652	\$40,617		

Pre-Clinical Program Phase Expenditures

As shown in Table 9, costs for the pre-clinical phase of the current model include tuition, fees, books, and program staff expenses. After accounting for financial aid reductions (estimated at 25% for CUNY), the *per participant* cost can be estimated at \$10,965 for the two year pre-clinical portion of the degree, based on number of enrollees. Of course, it should be noted that these costs are estimated and there will be some variation in the actual costs per student, as some participants come in with more transferable credits than others.

Clinical Program Phase Expenditures

Costs for the clinical portion of the model, which CEO participants complete through LIU's program at Kings County Hospital, include tuition, fees, and books and program staff expenses. After accounting for financial aid (estimated at 40% for LIU) and LIU rental income reductions, the *per participant* cost is \$29,651. Thus, the total cost of the four year BSN degree under the current program model is estimated at \$40,616 per participant.

LIU currently reports a 66% retention rate for its nursing students through the first program semester. Of those retained after the first semester, 70% complete the full two year program, resulting in an overall two year retention rate of 46%. Given that the CEO Nursing Career Ladder RN Program students enter the LIU program with a slightly higher GPA than the average LIU student (3.0 vs. 2.75), and that HHC is providing a retention support services program⁸ for clinical program students, it might be expected that the retention rate for CEO Nursing Career Ladder RN clinical program students would remain at approximately 70% throughout completion of the two year program. Based on the actual 51% pre-clinical completion rate noted above, together with the expected 70% clinical program completion rate, it is expected that 35% of the students who initially started will complete the full program. Based on these data, per completer costs for the current program can be estimated at \$64,289.9

_

⁸ The retention support services program is funded by \$500,00 in annual funding received as a grant from the Health Resources and Services Administration (HRSA).

 $^{^9}$ This estimate is calculated as follows, ($\$10,965 \times 40 / 20$) + ($\$29,651 \times 20 / 14$). The analysis is calculated using an example cohort of 40 students beginning the pre-clinical program, with 20 of these students continuing on to the clinical program, and, finally, 14 of these 20 students completing the full program.

Data Availability and Evaluation Options

Data Availability

As indicated in Table 10 below, a variety of data are available on program applicants and enrolled students, either from program applications or through regular student tracking efforts undertaken by program staff at HHC. The program maintains a participant database that includes information on 145 students accepted into the CEO Nursing Career Ladder RN program. The database includes student demographic and income data, including those summarized in tables displayed earlier, along with information on students' course enrollments by semester and financial aid and tuition costs covered by HHC funding.

While information on overall credit accumulation and transfer credits has been tracked for many current and former program participants, the database currently does not include this information for all students, nor does it include information on student attendance for most current and former students. Table 10 displays the outputs that could be tracked for the program and the current availability—to the best of our knowledge at this time—of the corresponding data sources.

Table 10. RN Nursing Career Ladder Outputs Data

Expected Program Outputs	Data Source	Viability/Access
N of applicants each semester/year	HHC records/Applications	In CEO Monthly
iv of applicants each semester/year	Tiffe records/Applications	Reports
N/% of students who meet federal poverty guidelines	HHC records/Applications	In database
N/% of students screened for commitment	HHC records/Applications	Not in database
N/% of students who sign work commitment pledge	HHC records	Not in database
N/% of applicants who pass the CUNY entrance exam	HHC/CUNY records	Not in database
Attendance rate in pre-clinical phase	HHC/CUNY records	Not in database
N/% of students in good academic standing in pre-clinical phase (GPA>=3.0)	HHC/CUNY records	In database
N/% of students who receive social and other support services	HHC records	Not in database
N/% of students who complete 64 pre-clinical credits	HHC/CUNY records	Not in database
N/% of students who pass HESI-A2 LIU exam	HHC/LIU records	In database
Attendance rate in clinical phase	HHC /LIU records	To be collected
N/% of students in good academic standing in clinical phase (GPA>=2.5)	HHC/LIU records	To be collected
N/% of students who complete 64 clinical credits and graduate with BSN	HHC/LIU records	To be collected
N/% of students who pass the RN licensure exam (NCLEX-RN)	HHC and state records	To be collected
N/% of graduates who take jobs at HHC hospitals	HHC records	To be collected
N/% of graduates who complete the four-year commitment	HHC records	To be collected

Tracking Participant Outcomes

Demographic data and some of the output data listed in Table 10 above were used to produce some mid-term findings for this report. As students continue to progress towards completion of the CEO Nursing Career Ladder RN Program, data on the above outputs will enable assessment of short-term, mid-term, and long-term outcomes. Program staff have already begun tracking outputs for students completing the pre-clinical requirements, as well as for those already enrolled in the clinical program. They will continue to maintain and update the participant database, currently in MS Access format, enabling assessments of actual vs. planned outputs and outcomes.

While assessment and tracking of outcomes is quite feasible given the data tracking methods already employed by HHC program staff, it may be challenging to identify and obtain data on a suitable comparison group, which would be useful to provide a point of reference for the participant outcomes such as program completion rates and career trajectories, as well as to begin to address the questions of the counterfactual (what might have happened if the participants did not enroll in the program). Data on nursing school students and graduates may be tracked by the nursing schools themselves, as well as by academic researchers and government agencies. Recommendations on comparison group options are included in the following section, along with conclusions resulting from mid-term evaluation activities.

IV. Conclusions and Recommendations from the Mid-Term Evaluation Activities

The evidence collected as part of this review suggests that the program is addressing an important need in the city. If successful, it will help low-income individuals to obtain high-paying jobs and will also result in more (and more diverse) RNs working in NYC hospitals. Given the predictions for ongoing nursing shortages in all five counties of NYC, the program takes the needs of hospitals into account by training additional nurses and reducing the need for expenditures on the recruitment and hiring of new nurses.

Results suggest that the program is targeting the appropriate populations to achieve its key programmatic goals. Furthermore, thus far, activities have been implemented as planned. Students who participated in focus groups were very enthusiastic about the program and expressed appreciation for the financial support, as well as the counseling services. Those who participated in the cohort model and were able to take classes together regularly indicated that this was very beneficial to them. Across the multiple focus groups that we conducted, participants expressed that the main challenges they have faced have been around the length and rigor of the program. While the earning potential of program graduates is clearly an incentive, many wondered whether they would be able to persist until completion. In fact, the data indicate that the retention rate for the program thus far, at 51 percent, is a bit lower than the national average.

The program's focus on the BSN, rather than the AAS degree, is aligned with the current trend toward having a more highly educated nursing workforce. However, the pros and cons of a focus on a BSN over an AAS are rather complex. Those who support the need for a BSN point to better patient outcomes, greater job satisfaction among employees, better long-term wages and promotion opportunities for nurses with BSNs. They also note that there are ongoing conversations about making the BSN degree required at all NY State hospitals. On the other hand, those who support the AAS as a better option point out that the degree can be completed more quickly than the BSN (theoretically) and starting salaries are comparable regardless of the degree held. Furthermore, recent data obtained from CUNY programs suggest that AAS nurses are not making less money in the long term than BSN nurses. (For more information on this topic, see Section V).

Based on our mid-term review of the Nursing Career Ladder RN program and analysis of the program participant data, we make the following recommendations for program refinements and

ongoing data tracking, the latter to enable assessments and improvements of participant outcomes:

- 1. Continue to provide academic, counseling, and social supports for program participants during both pre-clinical and clinical phases of the program. In order to protect the investment of CEO funds and maximize successful program outcomes by increasing retention rates, HHC should continue to provide supports to ensure that students make adequate academic progress and are able to meet their personal and familial obligations. Data suggest that these supports are particularly important for low-income students, who meet with additional obstacles to program completion. Support services should be provided for students in the pre-clinical phase of the program to help them meet the challenges of college coursework, particularly given that many students are facing these challenges for the first time and may already have families of their own. Support services are also critical for clinical program students, who must attend full-time and may face more challenging coursework in addition to working directly with patients for the first time; currently these supports are provided by a full-time, HRSA-funded case manager.
- 2. HHC should track students as they progress through the clinical portion of the program and identify their challenges in order to better align the supports that are needed during this phase. A more detailed data tracking form could be developed to ensure that all necessary data are collected as program implementation moves forward. HHC should also identify reasons that students drop out of the program, perhaps through surveys or interviews, in order to better align support levels during the pre-clinical phase and beyond. In addition, as students continue to progress through the pre-clinical program, HHC should conduct a more systematic study of the differences between outcomes for students in the pre-clinical program at different campuses and examine relationships between program implementation and outcomes. Going forward, the results of such an assessment could inform any planning for future program expansions or modifications.
- 3. After the first cohort of the CEO Nursing Career Ladder RN Program participants begin working in HHC hospitals, participant data should be analyzed to determine whether or not individual student characteristics are associated with program completion and other outcomes. This information could be used to improve student support services accordingly, to maximize participant success. Additionally, HHC should consider several ways to track long-term participant outcomes, such as tracking job tenure and promotions for program graduates employed at HHC hospitals and/ or by conducting alumni surveys focused on employment status and experiences, such as promotions and salaries. Surveys could be administered annually or every few years, via mail or online, and would require long-term tracking of participants' contact information for those not employed by HHC. One way to keep participants connected to the program, and perhaps increase survey response rates, would be to build connections to program alumni through annual reports and newsletters, which could also include reminders for participants to provide updated contact information.
- 4. Explore options for examining the impact of the program in the most rigorous manner possible. At a basic level, outcomes of students in the program should be compared with outcomes of other nursing students. Specifically, retention rates in clinical programs, GPAs,

graduation rates, pass rates on the nursing certification exam, employment rates, and salary levels can be examined. Comparative data are available from the CUNY programs; for example, CUNY reports results of surveys of nursing program graduates providing most of this data. CUNY currently conducts a survey of RN program graduates (both AAS and BSN) over a ten year period and publishes the data gathered through the survey (including employment rates, job types, and salaries and promotions) in a publicly available report. The Center for Health Workforce Studies at the State University of New York at Albany also collects statewide data on RN program graduates, and presents results at the state and local-level. Thus, data on Nursing Career Ladder RN students could be assessed in comparison to state and local trends in the nursing field. For a more rigorous comparison group, students on the CEO Nursing Career Ladder RN program wait list may be used for comparative purposes, provided that the comparison group is large enough to use for this purpose. Furthermore, outcomes for program participants could be compared to participants in other comparable programs including, for example, the 1199 SEIU initiatives and programs in other states that serve similar populations.

5. As participant outcomes are assessed over time, use participant data to inform decision making regarding the most appropriate programmatic model option. Once data are available on degree completion and participant job placements and salaries, CEO will be in an appropriate position to determine if the original model achieves programmatic goals. Moreover, it will be possible to determine whether programmatic goals may be achieved equally well through other program models, including associates degree or dual degree program options.

V. The Registered Nursing Field: Context for the CEO Nursing Career Ladder RN Program

To assess the CEO RN Program it is important to consider the context in which it operates. CEO asked Metis and Westat to conduct a review of the nursing field to identify relevant trends in training and hiring and the RN pathways available to New Yorkers. This section summarizes the findings from interviews with subject-matter experts and a review of background literature.

Overview

The role of the RN in health care delivery is a critical one. RNs work in a variety of medical settings and have a wide range of responsibilities. Depending upon the setting in which they work, RNs may be responsible for assessing a patient's physiological, emotional, and life-style characteristics; providing a preliminary diagnosis of any health conditions present; developing and implementing a plan for addressing a patient's health conditions, including the identification of desired outcomes for treatment, such as increased mobility or pain management; and evaluating the effectiveness of the care provided to the patient in terms of progress towards desired outcomes (American Nurses Association [ANA], 2009a). Given projections for ongoing demands for nurses, the preparation of RNs is currently a high-profile topic within the nursing field and in policymaking circles. The following sections will provide details on the current and

projected nursing shortages and on the various pathways to the RN credential in the U.S. generally and in NYC specifically.

Nursing Shortage: Causes and Correlates

The field of nursing has faced a worker shortage since 1998 (Auerbach, Buerhaus and Staiger, 2007). Cohort analysis of workers suggests that there will be 340,000 RN vacancies nationwide by 2020 (Auerbach et al., 2007). Each year, according to projections of the NYS Department of Labor, over 2,000 RN vacancies open up in NYC, with over half due to attrition and others due to increased demand for RNs.

O 500 1000 1500 2000 2500 3000 3500 4000 4500 Registered Nurses Licensed Practical and Licensed Vocational Nurses Openings due to growth Nursing Aides, Orderlies, and Attendants Openings due to attrition Home Health Aides

Figure 1: Projected Average Annual Job Openings 2006-2016 for Nurses and Related Professions in NYC

SOURCE: New York State Department of Labor

According to research, several factors contribute to the shortages, including lack of spaces in clinical nursing training programs. Recent expansions in nursing education have not kept pace with demand for spaces, given the oversubscription of many nursing programs. In 2006, across the U.S., almost 100,000 qualified applicants were turned away from nursing schools, making it clear that expansions in nursing education could get potential workers to occupy unfilled positions. Unfortunately, ongoing faculty shortages create a challenge to the expansion of nursing schools (Auerbach et al., 2007; Cleary et al., 2009). As a field, nursing faces a shortage of trained faculty that is compounded by the fact that academic positions pay less than clinical work. Nursing schools also are hampered by a shortage of clinical sites in which to place nursing students for the clinical training component of their education (Cleary et al., 2009).

Shortages of RNs may also be influenced by the impending retirement of many currently practicing RNs. According to the National Sample Survey of Registered Nurses, the average age of the nursing workforce has been increasing in recent decades, rising from below 40 in 1980 to 46.8 in 2004, with over a quarter of the nursing workforce over age 54. Although nursing shortages have eased in many areas as a result of the recent economic recession, which may have incentivized current RNs to put off retirement, this trend is likely temporary and a significant

nursing shortage is once again expected by 2020 or 2025 (Buerhaus, Auerbach, and Staiger, 2009; Cleary, McBride, McClure, and Reinhard, 2009; U.S. Department of Health and Human Services, 2004a).

While all of the preceding factors place downward pressure on the *supply* of nurses in the workforce, actual *demand* for nurses is expected to increase in the future as the U.S. population overall continues to age and the heath care needs of the baby boomer generation grow as they begin to approach retirement age. In 2000, the number of full-time RN positions across all care settings was estimated at 2,001,500; by 2020, this number is expected to increase by over 40 percent to 2,824,900 (U.S. Department of Health and Human Services, 2004b). Within NYC, according to the Center for Health Workforce Studies (CHWS) report, *The Health Care Workforce in New York*, 2007 (p. 57), the number of RN positions is projected to rise from 69,620 in 2006 to 78,930 in 2016.

In addition to the problem of an overall nursing shortage, the field of nursing continues to struggle to recruit a diverse workforce reflective of the communities in which nurses work. While the estimated number of male nurses increased by 273 percent between 1980 and 2004, men still represented only 5.8 percent of the total RN workforce as of 2004 (U.S. Department of Health and Human Services, 2004a). Furthermore, although 32.6 percent of the United States population identifies themselves as non-White, Hispanic, or Latino, only 10.7 percent of respondents to the 2004 National Sample Survey of Registered Nurses indicated that they belonged to a racial or ethnic minority (U.S. Department of Health and Human Services, 2004a).

Overview of RN Education in the United States

In order to become an RN in the United States, students are required to complete a degree at a state-approved school of nursing and pass the National Council Licensure Examination for Registered Nurses (NCLEX-RN; ANA, 2009b). There are three major educational pathways for completing a nursing degree to become an RN. Individuals can choose to attend a bachelor's of science degree program in nursing (BSN), an associate's in applied science degree program in nursing (AAS), or a nursing diploma program (U. S. Department of Labor, 2007). Additionally, there are RN to BSN programs for licensed RNs who have already completed an AAS or a diploma program, and LPN to RN programs for licensed practical nurses who wish to become RNs. As of 2006, there were 709 schools or institutions in the United States offering BSN programs, 850 offering AAS programs, and 70 offering diploma programs (U.S. Department of Labor, 2007). In addition, there were 629 RN to BSN programs and 197 accelerated BSN programs (U.S. Department of Labor, 2007).

Currently, AAS programs are the most popular pathway to the RN credential. Between 2000 and early 2004, 56.9 percent of all RNs completing their initial nursing education graduated from associate's degree programs, 39.9 percent graduated from baccalaureate or more advanced

_

¹⁰ While BSN and AAS degrees are conferred by accredited colleges and universities, nursing diploma programs do not terminate in a college degree; instead, they provide training for nurses directly in hospitals. Diploma programs require fewer courses than AAS programs, and thus nurses holding diplomas must complete more courses to earn a BSN degree through an RN to BSN program. Historically, diploma programs were the most common route to an RN credential, however they are rapidly being phased out in favor of college degree programs across the U.S.

programs, and only 2.8 percent of new nurses graduated from nursing diploma programs (U.S. Department of Health and Human Services, 2004a). While a large number of nurses initially graduate from AAS programs, a small percentage of these nurses go on to receive a more advanced degree. According to interviews with experts on the nursing field, approximately 15-20 percent of AAS graduates go on to earn the BSN degree; they speculate that full-time nurses may not have the time, interest, or funds to continue their education. The highest level of nursing or nursing-related preparation is a diploma for 17.5 percent of RNs, an associate degree for 33.7 percent, a baccalaureate degree for 34.2 percent, and a master's or doctoral degree for 13.0 percent (U.S. Department of Health and Human Services, 2004a).

NYC RN Training Programs

In the NYC metropolitan area, students interested in becoming an RN have many options in terms of both schools and pathways. As at the national level, in NYC the most popular pathway to RN licensure is the AAS degree. Other pathways include BSN programs for those without any prior nursing training and for those already holding an AAS, as well as accelerated programs for those already holding a bachelor's degree.

There are 29 schools in the NYC metropolitan area that offer programs leading to an RN credential. Nine schools (including two CUNY schools) offer regular BSN programs; fifteen schools (including nine CUNY schools) offer AAS programs; and 13 offer RN to BSN programs. Appendix C includes several tables displaying data on nursing training programs. Table B1 provides an overview of the RN education pathways available in the NYC metropolitan area and Table B2 provides a comparison of average salaries across the United States for AAS and BSN nurses in comparable positions. Table B3 provides a list of the schools in the metropolitan area that provide nursing programs leading to an RN and includes information on the types of degrees that they offer and the number of seats in each. Subsequent tables in Appendix C provide information on costs, required credits, and average time to completion for each of the NYC RN training programs leading to the BSN (Table B4), RN to BSN (Table B5), or AAS (Table B6) degree. Below are additional details on each degree program pathway.

BSN Programs

General BSN programs As indicated in Tables B3 and B4 in Appendix C, there are nine schools in the NYC metropolitan area that offer general BSN programs. These programs are designed for students who do not already hold a post-secondary degree and are interested in earning a baccalaureate degree and becoming an RN. The curriculum in the BSN nursing programs typically consists of two phases. The first phase consists of general education

¹¹ The report from which these figures were cited notes "The totals in each bar may not equal the estimated numbers of RNs in each survey year due to incomplete information provided by respondents and the effect of rounding. Only those provided initial RN educational preparation information are included in the calculations used for this chart." Thus the sum of these figures is 98.4% and not 100%.

requirements and prerequisite courses. During this time, the students take courses in a wide range of subjects including mathematics, science, social science, and humanities; however, specific requirements vary from program to program. In most programs, this initial phase is designed to take approximately two years. The second phase of study consists of nursing coursework and clinical experience. The number of credits students required to complete nursing coursework and clinical experience varies. Across the nine programs in the NYC metropolitan area, the number of required nursing credits ranges from 48 to 68, with an average of 59.5 required nursing credits. Overall, BSN nursing programs are designed to take approximately four years for full-time students.

In general, in order to be admitted into the nursing program, students must first be admitted to the college or university and complete prerequisite and general education coursework. Once they have done so, students will submit an application to the clinical nursing program. Specific requirements vary across colleges or universities. For example, within the two CUNY BSN programs, at Hunter and Lehman Colleges, applicants are typically required to have completed the prerequisite courses with minimum GPAs ranging from 2.5-3.0. Additionally, many NYC BSN programs require students to pass exams such as the NLN Pre-Admission RN exam in order to advance to the clinical phase. These schools consider both NLN scores and GPAs in admissions decisions, and some, such as Hunter College, rank applicants based on a weighted average of NLN scores and GPAs. According to nursing experts that we interviewed, at popular schools such as Hunter College, students accepted into the clinical program may have GPAs significantly above the published requirements due to the limited number of clinical nursing program seats. However, at other programs, such as the Lehman College BSN program, all students meeting published requirements are admitted into the clinical nursing program given that sufficient space is available to meet the current demand.

Upon completion of the baccalaureate degree, students are required to pass the NCLEX-RN in order to begin practicing as an RN. Of the NYC BSN programs for which information was available, the average passing rate was 80.6 percent in 2008, though the range was great (from 46.2 to 93.2 percent across programs).

The average cost per semester for BSN programs in NYC is approximately \$10,858; however, the tuition rates also vary greatly across the nine BSN programs. The least expensive program is the BSN program at CUNY's Lehman College, at a cost of approximately \$2,000 per semester. The most expensive school, New York University, costs almost ten times that amount, at \$19,329 per semester. Table B4 in Appendix C provides an overview of BSN programs in the NYC metropolitan area.

RN to BSN Programs

For students who already have an RN from either an associate degree or diploma program, there are 13 schools in the NYC metropolitan area that offer RN to BSN programs (see Table B5). The admission criteria vary across schools, but at minimum, applicants are required to have proof of licensure as an RN and to have completed a number of prerequisite courses. Typically, the prerequisites must have been completed with a minimum grade point average of 2.5; however, several schools indicate that a higher average is preferred.

These programs typically take less time to complete than the regular BSN programs, but the length of the program depends largely upon the number of credits that students are able to transfer from their previous nursing program. This figure ranges from 27 to 65, and is dependent upon factors such as types and levels of previous coursework and receipt of an associate degree or diploma. In general, the RN to BSN programs in the NYC metropolitan area are designed to take two years for full-time students; however, the program at SUNY Health Science Center – Brooklyn can be completed in only three semesters. Additionally, the program at St. Francis College is specifically designed for part-time students who continue to work; therefore, this program can take up to five years.

Like the length of the program, the required coursework in the RN to BSN programs varies depending on the number of credits the student is able to transfer from their previous experience. The overall number of credits required, including transfer credits, ranges from 65 to 128, with an average of 118 required credits. Similarly, the number of required credits of nursing coursework and clinical experience varies across the 13 programs. On average, the RN to BSN programs in the NYC metropolitan area require 34 nursing credits.

Like the regular BSN programs, tuition for the RN to BSN programs varies across schools. Again, New York University has the highest tuition at a rate of \$19,329 per semester and Lehman College has the least expensive tuition at a rate of \$2,000 per semester. On average, RN to BSN programs in NYC cost approximately \$7,292 per semester.

AAS Programs

In the NYC metropolitan area, there are 15 schools that offer AAS programs in nursing, nine of which are at CUNY colleges. These programs are designed for students with a high school diploma or who have passed the General Educational Development (GED) test. In addition, several of the AAS programs in the NYC metropolitan area require prospective students to take an admission exam. For example, all CUNY colleges require prospective students to pass exams such as the CUNY skills tests in English, mathematics, and writing. Similar to the BSN degree, the AAS degree program in nursing consists of a pre-clinical phase, during which students complete general education and pre-clinical nursing course requirements, and a clinical nursing phase consisting of coursework and nursing practica. After completing all pre-clinical requirements, students must apply for and be admitted to the clinical nursing program. Admission is based on GPA in pre-clinical courses and scores on the NLN pre-admission examination. Published minimum requirements range from 2.5 to 2.75 at most schools; however, according to information gathered through interviews with experts in the field, at many NYC public universities the oversubscription of AAS programs results in a higher actual GPA cut-off. Some schools offer waiting lists that give students a seat several semesters in the future, while others allow students to re-apply. However, they may never be admitted to a highly oversubscribed school, such as Borough of Manhattan Community College, without a GPA substantially higher than the published minimum. It should be noted that some AAS nursing

programs at public universities, such as the College of Staten Island, are not oversubscribed and accept all applicants meeting published admission requirements.¹²

In general, the AAS programs are designed to take two to three years for full-time students to complete.¹³ The programs require between 64 and 88 credits, with an average of 68 required credits. The coursework in AAS programs typically includes preclinical courses in math, science, English, social science, and nursing coursework and clinical experience. Across the 15 schools in the NYC metropolitan area that offer AAS degree programs, the number of required nursing credits ranges from 24 to 41, with an average requirement of 34 credits.

Upon completion of the AAS program, students are required to pass the NCLEX-RN examination in order to receive their RN license and begin practice. Of the schools for which data were available, the average passing rate was 86.5 percent in 2008, with a range of 78.3 percent to 100 percent.

In comparison to BSN programs, AAS programs are a less expensive pathway to RN licensure. Across the AAS programs in the NYC metropolitan area, the average tuition is \$3,154 per semester. At five of the schools offering AAS programs, the tuition is only \$1,575 per semester, which is the lowest tuition rate of any AAS program in the NYC metropolitan area. The most expensive AAS program is Phillips Beth Israel, which charges tuition of \$7,187 per semester.

In addition to regular AAS programs, seven schools in the NYC metropolitan area offer LPN to RN programs. In these programs, LPN students who are seeking an RN can receive transfer credits that will count toward their AAS degree. In three of the programs offering LPN to RN programs, students are required to take a National League of Nursing examination to demonstrate their knowledge and ability. One school requires LPNs to take the Statewide LPN to RN transition course, offered by the New York State Coalition for Educational Mobility, in order to receive credits toward their AAS. The number of transfer credits students in the LPN to RN programs are awarded ranges from 7 to 12 credits. Beyond the admissions process and the number of transfer credits, the LPN to RN programs are no different than the regular AAS programs. Table B6 in Appendix C provides an overview of the AAS programs available in the NYC metropolitan area.

AAS vs. BSN: Comparisons Between Pathways

In some ways, the AAS degree may be the most attractive pathway for many prospective nurses because there is currently a relatively small difference in starting salaries between AAS and BSN-educated registered nurses. Also, it is relatively less expensive and faster to complete the AAS degree as compared to the BSN. However, in NYC, some participants have reported that it may take three to four years (maybe as long as the BSN degree) to complete an AAS degree in particularly oversubscribed programs. Furthermore, according to experts in the nursing field, there is a growing trend toward preference for bachelor's educated RNs at many hospitals. In

¹² Admission rates vary by semester and year, and some programs are oversubscribed in some years and not in others.

¹³ Anecdotal evidence suggests that some AAS programs in NYC are so over-subscribed that some students must wait two years to be accepted into a clinical program while taking pre-clinical courses.

fact, several of the experts interviewed for this report indicated that legislation has been proposed that would eventually require all RNs to hold a bachelor's degree in order to practice in New York State. According to these experts, there are two main reasons behind this movement toward a more highly educated nursing workforce. First, there is some evidence that nurses with higher levels of education produce better patient outcomes, including lower mortality and morbidity rates (see Aiken et al., 2003; Friese et al., 2008; Estabrooks et al., 2005). Second, because nurses prepared at the BSN level tend to report higher job satisfaction, a key factor in retention, increasing the education level of the nursing workforce overall may help to reduce turnover (Rambur et al., 2003).

Furthermore, while starting salaries may be similar between AASs and BSNs, in many cases only BSN-prepared nurses are eligible to move up the career ladder to Head Nurse and other supervisory-level positions, while AAS nurses most often remain in direct care positions. According to evidence from interviews with experts in the nursing field, BSN-prepared nurses receive more training in on-the-job critical thinking skills in order to address the increasingly common complex care needs of patients. BSN nurses are also prepared to work in community health positions and are trained in leadership skills based on the assumption that they will move up through the career ladder to become Head Nurses.

Interestingly, however, not all information that we gathered suggested that the BSN pathway is far preferable to the AAS pathway. According to a recently released report on a survey of CUNY nursing graduates from 1997-2007, early career outcomes are fairly similar among CUNY AAS and BSN graduates (Office of the University Dean for Health and Human Services, 2009a). Over 83% of general BSN program graduates and over 82% of AAS graduates passed the NCLEX, on their first try. 14 Furthermore, promotion opportunities may have been similar for both groups, given that 59% of both AAS and BSN graduates reported working in a nursing job that required more specialized knowledge or skills than their first nursing position.

While starting salaries were the same, reported at \$62,000 for both AAS and BSN degree holders in 2006, some relatively small differences in salaries and work settings were apparent. Among nurses employed full-time with ten or less years of experience, the average annual salary was \$68,406 for those with only an AAS and \$71,412 for those with a BSN degree. Also, nurses holding an AAS or completing an RN to BSN program worked more often in non-hospital settings than BSN degree holders; however, this difference decreased with time. As shown in Table 11 below, a greater proportion of BSN graduates than AAS graduates secured their first nursing position in a hospital. When the data are disaggregated across the ten-year survey period, it is apparent that between 1997 and 2007, AAS nurses have become more likely to work in hospitals or community/public health agencies and less likely to work in nursing homes or extended care facilities (Office of the University Dean for Health and Human Services, 2009a). This trend mirrors nationwide trends in the nursing field in an increase in the number of RN positions available at community health agencies. As is the case for some hospitals, some community health agencies prefer to hire bachelors-educated RNs over AAS degreed nurses.

 $^{^{14}}$ NCLEX-RN passage rates have been rising among CUNY general BSN students. While the 83% passing rate is an average across 10 years, in the most recent 4 years passing rates averaged 86%.

Table 11: Survey of CUNY Nursing Graduates 1997-2007

v	AAS	BSN	RN to BSN	
Passed NCLEX on the first try	82.6%	83.7%	N/A	
Average annual salary	\$68,406	\$71,412	\$71,412	
Working in a job requiring more skill than first position	59.4%	58.7%	77.9%	
Holding more authority in current position than first position	69.4%	67.8%	76.2%	
More responsibility for supervising staff	64.2%	60.9%	69.8%	
<u> </u>	Setting of First Nursin	g Job	•	
Hospital	78.6%	85.3%	72.2%	
Nursing Home/Extended Care Facility	13.5%	5.4%	16.7%	
Community/ Public Health Agency/ Visiting Nurse Association	2.8%	5.5%	4.4%	
Higher Education	0.3%	0.4%	0.3%	
Physician's Office/ Ambulatory Care Setting	1.9%	1.1%	3.0%	
Student Health Service	0.3%	0.3%	0.7%	
Something Else	2.7%	2.1%	2.7%	
Sett	ing of Most Recent Nu	irsing Job	•	
Hospital	79.2%	83.8%	76.0%	
Nursing Home/Extended Care Facility	7.5%	4.6%	6.0%	
Community/ Public Health Agency/ Visiting Nurse Association	5.1%	5.5%	8.2%	
Higher Education	0.4%	0.4%	1.5%	
Physician's Office/ Ambulatory Care Setting	2.3%	2.7%	2.8%	
Student Health Service	1.3%	0.0%	2.5%	
Something Else	4.1%	3.0%	3.0%	

SOURCE: Office of the University Dean for Health and Human Services (2009a). The City University of New York 2008 Survey of Nursing Graduates (1997-2007) Summary Report.

AAS/BSN Dual Degree Model

In 2010, CUNY will launch its first dual degree AAS/BSN program at Queensborough College through a demonstration project funded by the Robert Wood Johnson Foundation (RWJF). The first of its kind in NYC, the dual degree program differs from traditional nursing degree programs in that students entering the AAS program are offered a seamless transition from preclinical to clinical coursework in the Queensborough Community College AAS program and the Hunter College BSN program. ¹⁵ Based on the Oregon Consortium for Nursing Education (OCNE) model, in which eight community college campuses partner with five BSN granting universities, the model is intended to increase the number of AAS degree holders who go on to complete the BSN (Tanner, Gubrud-Howe, & Shores, 2008). The OCNE developers sought to redesign a nursing program to ensure alignment between the AAS and BSN programs. In this new model, nurses in the AAS and BSN programs must meet the same admission requirements and will take the same courses during the first three years of the program. If students choose to continue towards the BSN after the third year, they will complete an additional year of clinical coursework. If not, they will take the RN exam and may choose to continue towards the BSN

-

¹⁵ The program will be offered to all incoming Queensborough AAS nursing students, which will continue to serve the same number of students as in prior years (as shown in Table B3 in Appendix C, Queensborough admitted 120 clinical nursing students in fall 2009 and 72 for spring 2010).

while working as a nurse. Since its launch in 2005, a total of 1,400 students have enrolled in the eight AAS programs participating in the OCNE dual degree program. Reported retention rates in the AAS portion of the program have been strong (approximately 90%) and over 93% of graduates passed the NCLEX-RN exam on the first try.

At CUNY, the curriculum of the dual degree program has been aligned with that of the BSN program so that all Queensborough students working towards the AAS complete the same courses as BSN students for the first three years of the program. If they earn a B average or above in the AAS program, students then need only to complete one year of full-time coursework (or two or more years of part-time courses) at Hunter College to complete the BSN degree. Thus, the program model increases the likelihood that AAS students will complete the BSN, given the ease of transition and articulation. In comparison, RNs holding a stand-alone AAS degree may need to take a greater number of credits to complete the BSN degree, after applying and being accepted to an RN to BSN program. As noted above, experts in the nursing field estimate that only 15-20 percent of current AAS degree holders go on to earn the BSN, compared with 45 percent of the most recent cohort of students enrolled in the OCNE model dual degree program.

RN Nursing Training Initiatives and Supports

Many nursing schools seek to provide supports to their students to help them meet the challenging demands of nursing training, and thereby maximize retention and completion rates. These supports may include counseling, tutoring, financial assistance, and community-building efforts, such as the creation of student cohorts who are housed together and/or complete all courses together. Such retention efforts are often targeted to particular populations, such as minority students or educationally disadvantaged students.

Similarly, motivated by ongoing shortages, a variety of initiatives are aimed at recruiting students into nursing training programs and ensuring that they receive a high quality training experience. Government agencies, hospitals, and foundations provide funding to colleges and universities and to individual students to recruit and retain nurses through the completion of the RN credential. Examples of such nursing training initiatives can be found at the local, state and national levels, from the CEO Nursing Career Ladder RN program in NYC, to state-funded partnerships between hospitals and colleges throughout Michigan, to federally funded scholarships and loan repayment programs for students who agree to work in hospitals experiencing a critical shortage of nurses. However, it should be noted that while a variety of such nursing training initiatives exist, the number of nurses trained in these programs is fairly modest in comparison with need.

The following sections describe nursing training initiatives implemented and funded by a variety of organizations and agencies at the national, state, and local (including NYC) levels. Appendix D provides information on these and other examples of RN nursing training initiatives at all three levels.

National and State-wide RN Nursing Training Initiatives & Supports

The primary source of federal support for nursing training initiatives is the Health Resources Services Administration (HRSA) of the US Department of Health and Human Services. HRSA administers a direct scholarship program to RN Nursing students, a loan repayment program for nursing graduates, and provides grants to colleges, universities, and government and non-profit agencies to offer scholarships and support services for disadvantaged RN nursing students. In 2007, the direct program awarded scholarships to 127 qualified applicants and entered into loan repayment agreements with 586 nurses across the US. ¹⁶ The US Department of Health and Human Services also operates the National Health Service Corps, which provides student loan forgiveness to RNs and medical professionals in return for a term of service in a hospital in a medically underserved area. According to the NHSC website, there are approximately 11 applicants for each scholarship award. ¹⁷ In addition, state agencies may provide supports directly to nursing program students through scholarships, such as those offered by the Higher Education Commission in Maryland and the Student Assistance Commission in Indiana.

Some foundations also fund nursing training supports through state or national initiatives. One example is the Pennsylvania Higher Education Foundation (PHEF), which offers grants to help Pennsylvania colleges and universities increase enrollment in nursing programs, improve student retention, and improve licensure pass rates. Over the last three academic years, PHEF disbursed over \$22 million to over 120 Pennsylvania Schools of Nursing, equaling an estimated 12,000 scholarships.

Foundation and government grants are often combined to create larger scale initiatives. For example, in Massachusetts the Commonwealth Corporation combined a \$2.9M grant from the US Department of Labor with \$8.9M from Commonwealth partners, including industry, labor, education, and workforce development organizations, to implement its own Nursing Career Ladders Initiative (NUCLI). The primary goal of the initiative was to recruit and retain 1,000 individuals through the completion of nursing education programs. This program provides funding to colleges to enable expansions of nursing programs and provide supports for students to improve retention. It also funds community organizations working to recruit and prepare disadvantaged students for nursing training. Initially, 1,955 participants were recruited and 1,013 participants remain in the nursing education pipeline as a result of NUCLI.¹⁸

Other nursing training initiatives have been developed through partnerships between hospitals and community organizations. In Washington, D.C., the United Alliance Foundation, a nonprofit community-building organization, combined foundation funding with a federal grant to develop the Health Alliance program, which recruited and supported low-income high school graduates through completion of an AAS program. The program began in 2002 with a partnership between Providence Hospital and the University of the District of Columbia, and was expanded to include a second partnership with Northern Virginia Community College, in Annandale, VA, and Sibley Memorial Hospital in Washington, DC in 2003. Participants received free tuition, free books and a \$250 monthly stipend to cover transportation costs, along with counseling support, during enrollment in an AAS program. Providence Hospital and Sibley Memorial Hospital provided

-

¹⁶ http://www.hrsa.gov/about/budgetjustification09/nursingeducation.htm

¹⁷ http://www.nhsc.hrsa.gov/scholarship/

¹⁸ http://www.commcorp.org/nucli/index.html

tuition support for students, and the United Alliance Foundation spent approximately \$15,000 per student per year to provide other supports. The program was discontinued due to a high attrition rate, and program staff cited the lack of academic preparation of enrolled students as the primary cause of attrition. They found that very few graduates of Washington, DC high schools were able to successfully complete coursework towards the AAS, even with ongoing academic and social supports. Of 60 students matriculating, only two have graduated and are employed as RNs at Providence Hospital. The program accepted its final cohort of new applicants in 2004 and continues to support the remaining two students through the completion of the BSN degree.

An earlier example of a nursing training initiative is a large scale program implemented in NY State from 1988 through 1991. In 1988, the Greater New York Hospital Association Foundation, in collaboration with other organizations, created the Ladders in Career Nursing program. The program offered financial resources and other support services to 442 health care workers to enable them to enroll in LPN, AAS, and BSN programs. The program completion rate was 93.2 percent, with 67 participants completing an LPN program, 265 completing an AAS program, and 79 completing a BSN program. Ninety percent of program participants passed the licensure exam (Robert Wood Johnson Foundation [RWJF], 1999). The program was developed in response to a severe nursing shortage in NYC in the 1980s, with an eye toward increasing the diversity of the nursing workforce. Program costs were supported by nearly \$850,000 in grants from the RWJF and nearly \$7 million from state agencies, participating institutions, unions, and private foundations (RWJF, 1999).

Because of the success of the program in New York, RWJF expanded the program to eight sites across the country: Texas, South Carolina, Rhode Island, North Dakota, Minnesota, Maryland, Iowa, and Georgia. While easing nursing shortages remained an important goal for the program, National Project L.I.N.C. placed a greater focus on educating nurses who were representative of the cultural and ethnic diversity of the communities in which they worked and fostering career development for minority nurses through a continuum of education from entry-level training through completion of masters degrees (RWFJ, 1999).

The Texas program was implemented in 1993 and consisted of twelve sites across the state. By 1997, 170 participants had enrolled in the program; 73 had graduated with nursing degrees and another nine from allied health programs. The Texas program worked with hospitals, particularly in rural settings, to provide educational opportunities for their existing health workforce. Participating institutions were encouraged to draw from the community for individuals to work with students. They worked with teachers to provide remedial education, pharmacists for medication instruction, and social workers and chaplains for counseling (RWJF, 1999).

In South Carolina, Project L.I.N.C. efforts were concentrated on alleviating shortages of health care workers in high-poverty rural areas in the state. The project aimed to help rural hospitals increase their work force by facilitating career advancement for entry-level employees. Another goal of the project was increasing minority representation in the health workforce; while 33 percent of the state's population was minority, the RN population was 92 percent Caucasian. Access to education was difficult for many of the residents of these areas. Project L.I.N.C. partnered with Trident Technical College and Midlands Technical College to offer programs in

diagnostic medical sonography, pharmacy technician, and medical records via satellite to rural locations. Rural health facilities sponsored students for the programs; additional supports to students were delivered via nine mobile learning centers enabling students to access computers and other educational resources. Students also were able to access the state's Area Health Education Centers by telephone and computer as well as in person for assistance with literature searches and licensure exam review courses (RWJF, 1999).

Between 1993 and 1997, 227 students enrolled in South Carolina's Project L.I.N.C.; 75 had graduated by 1997. All graduates returned to their sponsoring organization to work, receiving significant pay raises. Minorities represented at least 32 percent of enrolled students during each year of the grant. RWJF contributed \$542,395 in support of the program; additional support was received in services from South Carolina Educational Television, as well as \$200,000 annually from the Duke Endowment and about \$74,000 annually from the Fullerton Foundation (RWJF, 1999).

At the end of the RWJF grant period, 934 participants had been enrolled across all eight Project L.I.N.C sites. At the close of the program (in 1995), there were 365 (39 percent) graduates, 328 of whom were working in nursing (263 in nursing and 65 in advanced nursing) and 37 in allied health professions. Oversight of all Project L.I.N.C sites was shifted to state agencies at the end of the grant period. While some programs continued to operate under other names or in more limited capacities, it appears that none of the sites is still in operation today. One example is the former Georgia project, which was transformed into a scholarship program without any counseling supports and subsequently ended in the early 2000s.

As these examples indicate, efforts to impact the nursing shortage, whether through expansion of nursing training programs or recruitment and retention of students, can come from a variety of sources including state and federal grants, as well as private foundation grants. Colleges and universities apply for such grants to expand their nursing programs and address the specific factors relevant to the nursing shortage.

Local-Level RN Nursing Training Initiatives & Supports: NYC

In NYC, as elsewhere around the US, nursing programs are oversubscribed and many qualified applicants are denied entry. This is generally the case at the public nursing programs operated by the City University of New York (CUNY), which offers nine AAS programs and two general BSN programs across its many campuses citywide. CUNY receives funding for nursing program supports from federal, state, local, and private grants, and this funding provides everything from student scholarships to faculty training to expansions of and improvements to clinical program sites. For example, beginning in the fall of 2009, a grant from the NYC Department of Small Business Services added 50 seats to some of the most oversubscribed nursing programs in NYC, those at Hunter College (BSN), Lehman College (BSN), and BMCC (AAS). Another grant, from the NYC Council added 55 seats to AAS programs at NYC College of Technology and Queensborough and Kingsborough Community Colleges. By utilizing grant funds to expand and enhance programs, CUNY has doubled the number of graduates from all nursing programs university-wide in the last five years. However, it should be noted that while CUNY has

-

¹⁹ http://www.rwjf.org/pr/product.jsp?id=16429

expanded nursing program capacity where possible, there remains a shortage of seats relative to the number of qualified applicants.²⁰

According to interviews with the CUNY Dean of Health and Human Services and a representative of the 1199 SEIU NYC health care workers union, those students who are admitted to oversubscribed CUNY nursing degree programs tend to have academic qualifications well above the published minimum requirements for entry (see Table 12 below), although there is a fair amount of variation across campuses. Nursing is an attractive career for many New Yorkers given the high demand for nurses, the resulting job security, and the relatively high starting salaries. According to the Dean, the AAS degree may be particularly attractive those who seek to minimize their time out of the workforce because it offers a high starting salary for completion of an associate's degree, and because starting salaries for AAS and BSN degree holders are often identical or very close. However, since NYC faces the same challenges to expansion of nursing training as the rest of the US, including a lack of faculty and scarce clinical training sites, a CUNY AAS nursing degree is difficult for many qualified applicants to obtain. Moreover, earning the grades and exam scores necessary to qualify for admission is a preliminary challenge that may pose a barrier to some interested in a nursing career.

Table 12. CUNY AAS Clinical Nursing Program Requirements

School	Clinical Program	Pre-Clinical Credits	Required GPA	
	Seats			
CSI	Data not available	13	2.5	
Medgar Evers	60 per year	15	2.7	
City Tech	80 per semester	14	2.5	
BMCC	Data not available	13	2.5	
BCC	70 per semester	15	2.5	
Hostos	40 per year	12	2.5	
KCC	100 per year	14	2.5	
LaGuardia	60-65 per semester	14	2.75	
QCC	70-75 per semester 13		2.75	

Faced with stiff competition, applicants may have to wait several semesters, or even years, to be admitted to some CUNY AAS clinical nursing programs. If they prefer not to wait and have access to funding or loans to cover higher tuition, they may choose to attend a private university, where there may be less competition for seats. For some students, another option is to obtain a seat in a nursing training support program such as the CEO Nursing Career Ladder RN program, or the tuition support programs offered to members of the 1199 SEIU healthcare workers union. In NYC, these two programs seem to be unique in their provision of financial, academic, and counseling supports for participants. Perhaps even more importantly, they provide participants with access to seats in a clinical nursing program, as long as they meet the minimum academic requirements. One example is CUNY's Borough of Manhattan Community College (BMCC), which allocates 15 seats each semester to students who are sponsored and qualified members of the 1199 SEIU.

_

²⁰ As described by CUNY's Dean of Health and Human Services, during an interview on September 30, 2009.

The 1199 SEIU offers two programs to members interested in pursuing an AAS or BSN degree in order to obtain RN licensure, the Tuition Assistance Program and the Health Careers Core Curriculum (HC4) program. The Tuition Assistance Program is currently serving 20,000 1199 SEIU members. Participants receive a voucher for up to six credits per semester if they attend a nursing program at a public university, including CUNY AAS and BSN programs and the SUNY Downstate RN to BSN program. Participants attending private universities are reimbursed for tuition costs for up to six credits. CUNY reserves some seats in its AAS and BSN programs for 1199 SEIU members, who are given priority for these seats as long as they meet the minimum academic requirements. Thus, 1199 SEIU members may gain access to clinical training programs even though their academic qualifications are lower than the average admitted student not enrolled in a special program. Most members work full-time and attend school part-time, which results in taking many years to complete the program. Members enrolled in this program are primarily hospital service employees who earn relatively low wages. According to a representative from the 1199 SEIU, over 80% of Tuition Assistance Program participants complete the AAS or BSN degree and obtain RN licensure. A CUNY report on 1199 SEIU represented workers enrolled at CUNY found that from 2000-01 through 2007-08, 12 percent of AAS nursing graduates and 9 percent of general BSN graduates were 1199SEIU members at the time of their graduation (Office of the University Dean for Health and Human Services, 2009b).

The Health Careers Core Curriculum (HC4) program, currently serving 3,000 1199 SEIU members, is open to students who have passed the CUNY entrance exam. It gives 1199 SEIU members the opportunity to complete nine preclinical nursing courses required by nursing programs, including English, Anatomy & Physiology, Psychology, and Sociology, in-house at 1199 SEIU facilities in Manhattan, Brooklyn, the Bronx, and Staten Island. Courses are taught by CUNY instructors at the 199 sites, with the exception of lab courses, which are taught on CUNY campuses. As many interested students as possible are referred to this "gateway program." Program staff see it as a cost saver over enrolling students in pre-clinical courses at CUNY because they incur only the direct costs of hiring faculty, rather than paying individual student tuition. According to information gathered through a recent interview with an 1199 SEIU representative, most interested 1199 SEIU members are able to enroll in any course they like; however, sometimes courses fill up quickly and students may have to wait a semester to gain entry to a course.

Conclusion

Although current budget challenges are limiting hiring of new nurses at present, it appears that the long term need for new RNs is real. Demand is expected to increase, especially as more experienced RNs take over higher-level positions. Therefore RN training programs help prepare the City's workforce to meet employer and public-health needs.

Given the scarcity of programs like CEO's in NYC, it can be concluded that the program is connecting participants to an opportunity they might not otherwise have. However, the review of the field uncovers a number of various pathways to becoming an RN. For example, AA programs have advantages and disadvantages over BSN programs, especially in terms of time, cost, and completion rates. In determining the program model going forward, CEO should consider which of the options available would best benefit its target population.

References

- Aiken, L.H., Clarke, S.P., Cheung, R.B., Sloane, D.M., & Silber, J.H. (2003). Educational levels of hospital nurses and surgical patient mortality. *JAMA*, 290(12), 1617-1623.
- Anders, R.L., Edmonds, V.M. Monreal, H., & Galvan, M.R. (2007). Recruitment and retention of Hispanic nursing students. *Hispanics Health Care International*, *5*(3), 128-135.
- Auerbach, D. I., Buerhaus, P. I. & Staiger, D. O. (2007). Better Late than Never: Workforce Supply Implications of Late Entry into Nursing. *Health Affairs*, 26(1), 178-185. doi: 10.1377/hlthaff.26.1.178
- American Federation of Teachers. (2003) *Student Persistence in College: More than counting caps and gowns.* Washington, DC.
- American Nurses Association. (2009a). *The nursing process: A common thread amongst all nurses*. Retrieved July 9, 2009 from http://www.nursingworld.org/EspeciallyForYou/StudentNurses/Thenursingprocess.aspx.
- American Nurses Association. (2009b). *Nursing Education*. Retrieved from http://www.nursingworld.org/EspeciallyForYou/StudentNurses/Education.aspx.
- Bailey, T., Jenkins, D., & Leinbach, T. (2005). Community College Low-Income and Minority Student Completion Study: Descriptive Statistics from the 1992 High School Cohort.

 Community College Research Center, Teachers College, Columbia University, p.34-36.
- Buerhaus, P.I., Auerbach, D.I., & Staiger, D.O. (2009). The recent surge in nurse employment: Causes and implications. *Health Affairs*, 28(4), w634-w645.
- Buerhaus, P. I., Donelan, K., Ulrich, B. T., DesRoches, C. & Dittus, R. (2007). Trends in the Experiences of Hospital-Employed Registered Nurses: Results From Three National Surveys. *Nursing Economics*, 25(2), 69-80. Retrieved from Academic Search Premier Database.
- Center for Health Workforce Studies (2007). *The Health Care Workforce in New York, 2007: Trends in the Supply and Demand for Health Workers.* School of Public Health, State University of New York, Albany.
- Cleary, B.L., McBride, A.B., McClure, M.L., & Reinhard, S.C. (2009). Expanding the capacity of nursing education. *Health Affairs*, 28(4), w634-w645.
- Estabrooks, C.A., Midodzi, W.K., Cummings, G.C., Ricker, K.L. & Giovanetti, P. (2005, March/April). The impact of hospital nursing characteristics on 30-day mortality. Nursing Research, 54(2), 72-84.

- Friese, C.R, Lake, E.T., Aiken, L.H., Silber, J.H. & Sochalski, J. (2008, August). Hospital nurse practice environments and outcomes for surgical oncology patients. *Health Services Research*, 43(4), 1145-1163.
- Office of the University Dean for Health and Human Services (2009a). The City University of New York 2008 Survey of Nursing Graduates (1997-2007) Summary Report.
- Office of the University Dean for Health and Human Services (2009b). 1199SEIU Represented workers Enrolled at The City University of New York.
- Rambur, B., Palumbo, M.V., & Mongeon, J. (2003). A statewide analysis of RNs' intention to leave their position. Nursing Outlook, (51)4, 182-188.
- Robert Wood Johnson Foundation (1999). Ladders in Nursing Careers Program. Grant Results Report. Princeton, NJ.
- Tanner, A., Gubrud-Howe, P., & Shores, L., (2008). The Oregon Consortium for Nursing Education: A Response to the Nursing Shortage. *Policy, Politics, & Nursing Practice* 9(3), 203-209.
- U.S. Department of Health and Human Services, Health Resources and Services Administration. (2004a). *The Registered Nurse Population: Findings from the 2004 National Sample Survey of Registered Nurses*. Retrieved July 20, 2009 from http://bhpr.hrsa.gov/healthworkforce/rnsurvey04/.
- U.S. Department of Health and Human Services, Health Resources and Services Administration. (2004b). What is behind HRSA's projected supply, demand, and shortage of registered nurses? Retrieved July 20, 2009 from ftp://ftp.hrsa.gov/bhpr/workforce/behindshortage.pdf.
- U.S. Department of Labor, Bureau of Labor Statistics. (2007). *Occupational Outlook Handbook*, 2008-09 Edition, Registered Nurses. Retrieved from http://www.bls.gov/oco/ocos083.htm.

Appendix A. CEO Nursing Career Ladder RN Program Context/Literature Review Interviews	

CEO Nursing Career Ladder RN Program Context/Literature Review Interviews

Interviewee	Date	Conducted By
Diana Mason		·
 Former editor of American Journal of Nursing Producer and host of radio show on health care and health policy 	July 27, 2009	Mari Cunnington at Metis & Tina Winters at Westat
Polly Bednash • Executive Director of the American Association of Colleges of Nursing	August 3, 2009	Mari Cunnington at Metis & Tina Winters at Westat
Cathryne Welch	August 3, 2009	Mari Cunnington at Metis & Tina Winters at Westat
Jean Moore	August 4, 2009	Tina Winters at Westat
Darlene Curley	August 6, 2009	Tina Winters at Westat
Cornel Clarke • Program Staff, 1199 SEIU RN Nursing Tuition Supports	September 21, 2009	Mari Cunnington & Susanne Harnett at Metis & Tina Winters at Westat
Dr. William Ebenstein • University Dean for Health and Human Services, City University of New York	September 30, 2009	Mari Cunnington & Susanne Harnett at Metis & Tina Winters at Westat
 Dr. Chris Tanner Youmans Spaulding Distinguished Professor, Oregon Health & Science University Oregon Consortium for Nursing Education program leader 	October 12, 2009	Mari Cunnington at Metis

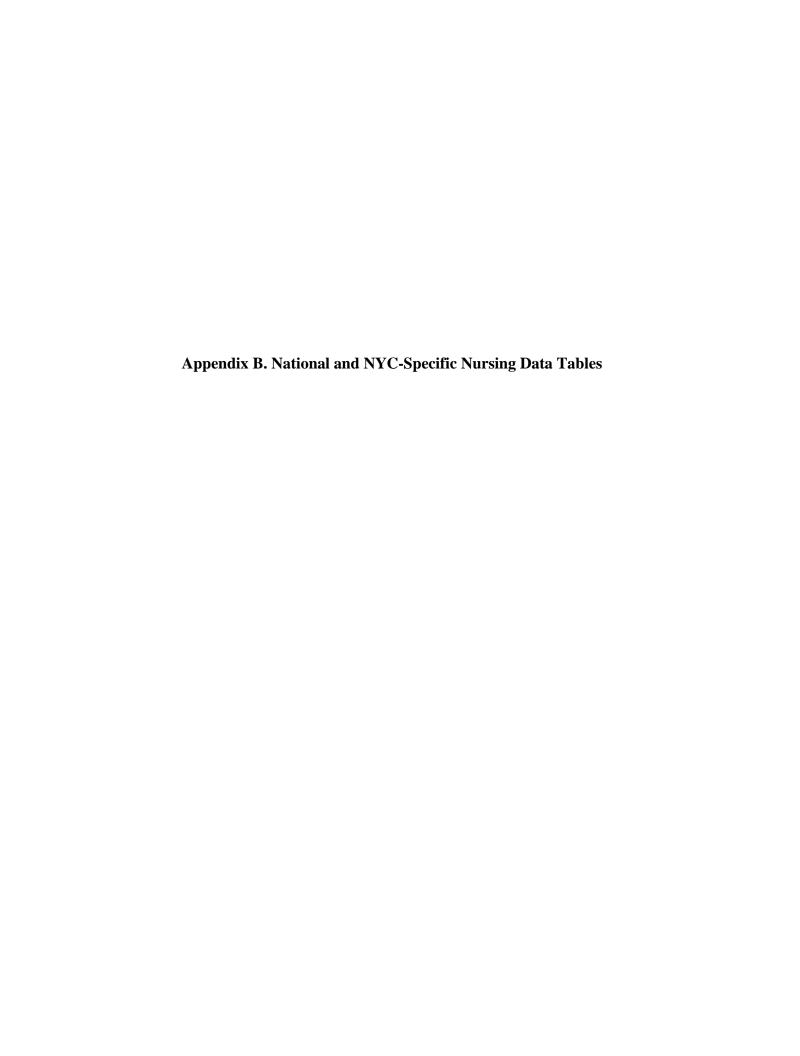


Table B1. Degree Program Comparison Data

	Current Nursing Career Ladder RN Program		Other RN Degree Pathways				
	BSN Pre-Clinical (CUNY)	BSN Clinical (LIU)	AAS Pre- Clinical (CUNY)	AAS Clinical (CUNY)	BSN Clinical (CUNY-Gen)	BSN Clinical (CUNY Completer)	AAS/BSN Dual Degree (Oregon Model) ⁴
I. Program Completion Considerations							
Credits	62-72	64	31-33	32-34	48-67 nursing/ 120 total	36.5 nursing/ 57 total	120
Average Time to Completion	2 years ¹²	2 years	1-2 years	1.5-2 years	2-3 years	3-4 years	4 years (3 years for AAS +1 addtl. year for BSN)
Average Cost Per Year ¹	\$3,800 (tuition, fees, & books, less 25% financial aid) + \$1,161 bridge + \$1,063 admin summer and fall ¹³	\$20,036 (tuition, fees, & books, less 40% financial aid & LIU rental income of 33% tuition per student) 66% 1 st semester; 70% of remaining cohort	\$3,800 (tuition, fees, & books, less 25% financial aid) + \$1,063 admin for HHC students	\$3,800 (tuition, fees, & books, less 25% financial aid) +\$1,063 admin for HHC students	\$5,571 (tuition, fees, & books, less 25% financial aid) + \$1,063 admin for HHC students	\$3,754 (tuition, fees, & books, less 25% financial aid) + \$1,063 admin for HHC students	AAS: \$3,800 BSN: \$5,571 (tuition, fees, & books, less 25% financial aid) + \$1,063 admin for HHC students
Retention/Completion Rates	51% HHC Students ¹⁴	retained through complete program (46.2% of all students in each cohort) ¹³	does not track preclinical retention	Two years: 55%; Three years: 75%	Three years: >95%	Lehman ²¹ : 73% FT 67% PT Hunter: 82% FT 61% PT	Approx. 90%

.

Retention rate data describes returning non-graduated students from prior year cited on http://www.citytowninfo.com/school-profiles/cuny-hunter-college and http://www.citytowninfo.com/school-profiles/cuny-lehman-college

	Current Nursing Career Ladder RN Program		Other RN Degree Pathways				
	BSN Pre-Clinical (CUNY)	BSN Clinical (LIU)	AAS Pre- Clinical (CUNY)	AAS Clinical (CUNY)	BSN Clinical (CUNY-Gen)	BSN Clinical (CUNY Completer)	AAS/BSN Dual Degree (Oregon Model) ⁴
Damasanakisa	33.2% White; 35.2% Black; 12.3% Hispanic; 19.5% Asian; 0.1% American Indian	25% White; 36% Black; 12% Hispanic; 14% Asian; 8% Unknown; 6% Foreign	30.3% White; 47.9% Black; 11.1% Hispanic; 10.6% Asian; 0.1% American Indian	30.3% White; 47.9% Black; 11.1% Hispanic; 10.6% Asian; 0.1% American Indian	33.2% White; 35.2% Black; 12.3% Hispanic; 19.5% Asian; 0.1% American Indian	33.2% White; 52.2% Black; 7.3% Hispanic; 7.3% Asian; 0.1% American Indian	Not Available
Demographics	Lehman: 2.75 Hunter: No specific requirement (holistic	2.75 overall & sciences/ 3.0 required for HHC	HS Diploma or GED; CUNY certification in math, writing, and reading; pre- requisites for pre- clinical biology	Varies from 1.75 (La Guardia) to 2.75 (Queens Community	Lehman: 2.75 Nursing Courses/ 2.0 overall Hunter: 3.0 Nursing Courses/	American mulan	Not Available
Minimum GPA	review)	students ¹¹	course	College)	2.0 overall	2.5	3.0

	Current Nursing Career Ladder RN Program		Other RN Degree Pathways					
	BSN Pre-Clinical (CUNY)	BSN Clinical (LIU)	AAS Pre- Clinical (CUNY)	AAS Clinical (CUNY)	BSN Clinical (CUNY-Gen)	BSN Clinical (CUNY Completer)	AAS/BSN Dual Degree (Oregon Model) ⁴	
Average GPA of Admitted Students Average Passage Rates for First-Time NCLEX-RN Takers	Lehman: 2.7 ⁶ Hunter: 3.0	2.75 LIU students ¹⁰ 2.8-2.9 HHC students	HS Diploma or GED; CUNY certification in math, writing, and reading; pre- requisites for pre- clinical biology course	Varies by school, number of applicants, and qualifications of applicant pool; at BMCC it may be 3.75 some years	Hunter: 3.5; Varies depending on cohort ⁷	Lehman: 3.3 N/A – programs open only to previously licensed nurses	Not Available	
II. Employment Consid	erations							
Starting Salary	N/A	\$61,528 ² (HHC)	N/A	\$60,528 ⁸	\$61,528 ² (HHC)	\$61,528 ² (HHC)	\$61,528 ² (HHC)	
	\$61,528 ³	New graduates generally work in staff nursing positions in hospitals and perform similar work to new ADN		New graduates generally work in staff nursing positions in hospitals and perform work similar to new	New graduates generally work in staff nursing positions in hospitals and perform similar work to new ADN	Varies according to prior	New graduates generally work in staff nursing positions in	
Type of Work	(HHC)	nurses	N/A	BSN nurses	nurses	RN experience	hospitals	

	Current Nursing Career Ladder RN Program			Other RN Degree Pathways				
	BSN Pre-Clinical (CUNY)	BSN Clinical (LIU)	AAS Pre- Clinical (CUNY)	AAS Clinical (CUNY)	BSN Clinical (CUNY-Gen)	BSN Clinical (CUNY Completer)	AAS/BSN Dual Degree (Oregon Model) ⁴	
Promotion Opportunities ¹³	N/A	Greater than AAS; administrative/leadership opportunities	N/A	Less than BSN, limited management opportunities	Greater than AAS; administrative/leadership opportunities	Greater than AAS; administrative/leadership opportunities	Depends on degree completed (AAS or BSN)	
Long-Term Salary Differential ⁹	N/A	Approximately \$115,000 more than an AAS over 25 years ⁹	N/A	Approximately \$115,000 less than a BSN over 25 years ⁹	Approximately \$115,000 more than an AAS over 25 years ⁹	Approximately \$115,000 more than an AAS over 25 years ⁹	Approximately \$115,000 more than an AAS over 25 years ⁹	
Benefit to HHB5	N/A	Reduced Recruitment and Hiring Costs of approx. \$10K ⁵	N/A	Reduced Recruitment and Hiring Costs of approx. \$10K ⁵	Reduced Recruitment and Hiring Costs of approx. \$10K ⁵	Reduced Recruitment and Hiring Costs of approx. \$10K ⁵	Reduced Recruitment and Hiring Costs of approx. \$10K ⁵	

¹ Assumes full-time attendance in all programs except BSN Completer and BSN portion of Dual Degree program

² Admission to Clinical Nursing Programs is determined by a total score based on pre-clinical GPA and score on a predictive assessment of clinical nursing students, the NLN-RN

³ Current HHC starting salary; expected to increase over time, dependent on union negotiations

⁴CUNY recently launched an AAS/BSN degree program based on this model, which may serve its first cohort in fall of 2010.

⁵ Average RN recruitment cost estimate cited by a study conducted by the University of Oregon's Labor Education and Research Center, in a study commissioned by the AFL-CIO titled *Solving the Nursing Shortage*, available at: http://www.afscme.org/publications/1193.cfm

⁶ Average entering student GPA from Peterson's Four Year Colleges 2006

⁷ Anecdotal evidence indicates that Hunter receives a large number of applicants for a relatively small number of seats (e.g. 200 applicants for 80 seats). Given that admits are based on GPA and scores on the NLN-RN exam, average entering GPA levels will vary each year according to the academic strength of the applicant pool. A 2009 graduate noted that the average entering GPA for her clinical nursing cohort was 3.5 (on a 4.0 scale); the Hunter College Coordinator of Student & Alumni Activities and Community Outreach confirmed this figure.

⁸ Nancy Doyle, HHC Assistant Vice President, HR & Workforce Development, indicated HHC hospital starting salaries for ADN graduates are approximately \$1,000 less than those for BSN graduates.

⁹ Based on national data published by HHS on average RN salaries by degree type, assuming 15 years as a staff nurse and 10 years as head nurse, for simplicity of model estimation.

¹⁰ According to anecdotal evidence resulting from comments made by LIU counselors, most students meeting eligibility requirements are accepted into the clinical program.

¹² According to anecdotal data from HHC, based on LIU projections. Varies according to student characteristics, e.g. number of credits eligible for transfer.

¹⁵ Based on interview data and Bureau of Labor Statistics Reports.

¹¹ While LIU requires a 2.75 GPA for admission into the nursing program, the HHC program has elected to only offer LIU clinical seats to students completing pre-clinical requirements with a 3.0 GPA, to assure their success in clinical courses.

¹³ Goal is to raise retention rate to 80% for HHC students; HHC received HRSA grant to provide \$250 stipend and supports for transition to clinical program. This bridge program provides study skills, time management skills, etc. through 15 hours of workshop sessions.

¹⁴ HHC estimates that 78% of RN nursing students were retained through the end of the pre-clinical phase, however they caution that this estimate includes replacement students enrolled each semester. HHC participant data indicates 49% of all students ever enrolled were no longer enrolled by October 2009.

¹⁶ Average passing rate for all CUNY programs in NYC over the ten year period from 1997-2007, as cited in: Ebenstein, W., Dale, T., Croke, E., & Torres-Chae, Charles (2009). *The City University of New York 2008 Survey of Nursing Graduates (1997-2007) Summary Report.* John F. Kennedy, Jr. Institute for Worker Education.

¹⁷LIU passing rate reported to Metis by HHC staff; reportedly increased from 50% in 2004 to 93% in 2007.

Table B2. Average Annual Earnings in Principal Nursing Position of Nurses Employed Full Time, by Position and Degree Level

	Associate Degree	Baccalaureate
Administration	\$60,442	\$68,696
Consultant	\$56,194	\$61,536
Supervisor	\$54,379	\$60,716
Instruction	**	\$55,877
Head Nurse or Assistant Head Nurse	\$55,791	\$63,486
Staff Nurse	\$51,477	\$54,003
Nurse Practitioner	**	\$65,459
Clinical Nurse Specialist	\$56,526	\$60,357
Nurse Clinician	\$52,734	\$54,499
Certified Nurse Anesthetist	**	\$122,479
Research	**	\$59,820
Home Health	\$48,290	\$54,837
Patient Coordinator	\$50,600	\$55,846
Other	\$50,477	\$58,516

SOURCE: U.S. Department of Health and Human Services, Health Resources and Services Administration. (2004). *The Registered Nurse Population: Findings from the 2004 National Sample Survey of Registered Nurses*.

Table B3. Overview of Nursing Progra	ms in the N	ew York Mo	etropolitan Ar	ea ²²
	Regular BSN	RN-BSN	Accelerated BSN	AAS
Bronx Community College				70 per
				semester
College of Mount Saint Vincent	N/A	N/A	N/A	
College of Staten Island		N/A		N/A
CUNY Borough of Manhattan Community				N/A
College				IN/A
Herbert H. Lehman College	60 per year	unlimited		
Hostos Community College				40 per year
Hunter College - Bellevue School of Nursing	100 per year	Not decided yet	40 per year	
Kingsborough Community College				100 per year
LaGuardia Community College				60-65 per semester
Long Island College Hospital School of Nursing				80-100 per year
Long Island University (Brooklyn)	unlimited	unlimited		
Medgar Evers College		100		60 per
		per year		year
Monroe College				30 per year
NYC College of Technology		90 per		80 per
		semester		semester
New York Institute of Technology Manhattan Campus	N/A			
New York University	In total, 300 per fall semester and 150 per spring semester			
Phillips Beth Israel				150 per year
Queensborough Community College				72-120
(Note: beginning in 2010, all entering AAS				
students will be eligible to continue for the				per semester
BSN at Hunter College)				Schiester
St. Francis College		unlimited		
St. Joseph's College - Main Campus		unlimited		

²² Blue cells represent programs currently offered; gray cells indicate program is not currently offered.

Table B3. Overview of Nursing Programs in the New York Metropolitan Area ²²					
	Regular BSN	RN-BSN	Accelerated BSN	AAS	
St. Vincent's Catholic Medical Center of New York - Brooklyn & Queens				unlimited	
St. Vincent's Catholic Medical Center of New York - Staten Island				90 per semester	
SUNY Health Science Center - Brooklyn		60-70 per year	60-70 per year		
The College of Staten Island*				N/A	
Touro College				30-40 per year	
Wagner College	40 per year	unlimited	25 per year		
York College	To launch 2010	N/A			
Total	9	13	4	15	

^{*} Note that some colleges and universities did not provide information on the number of program seats available.

Ta	able B4. Overv	iew of BSN Progra	ams in Metr	opolitan New	y York		
School Name	Number of	Number of	Time to	Tuition	NCLEX-RN 2008		
	Required Credits ^a	Required Nursing Credits	Complete Degree ^b	(Semester)	Students Attempting	Students Passed	Passing Rate
College of Mount Saint Vincent	-	-	4 years	\$12,290	43	37	86 %
Herbert H. Lehman College	120	48	4 years	\$2,000	96	81	84 %
Hunter College - Bellevue School of Nursing	-	-	4 years	\$2,500	74	68	92 %
Long Island University - (Brooklyn)	128	64	4 years	\$14,474	131	120	92 %
New York Institute of Technology Manhattan Campus	129	49	4 years	\$12,070	13	6	46 %
New York University	128	64	4 years	\$19,329	252	217	86 %
Pace University	128	68	4 years	\$16,313	44	41	93 %
Wagner College	-	-	-	\$16,290	32	21	66 %
York College	120	64	-	\$2,456			-
Average Across Programs	125.5	59.5	4 years	\$10,858			81 %
				ldents and assage Rate	685	591	86 %

^a - Indicates that the information was not available on the program website
^b Amount of time the program is designed to be completed in for full-time students

Table B5. Overview of RN-BSN Programs in Metropolitan New York						
School Name	Number of Required Credits ^a	Number of Required Nursing Credits	Number of Transfer Credits Allowed	Time to Complete Degree ^b	Tuition (Semester)	
College of Mount Saint Vincent	126	-	65 for associates, 30 for diploma	2 years	\$12,290	
College of Staten Island	120	58	-	-	\$2,300	
Herbert H. Lehman College	120	27	-	2 years	\$2,000	
Hunter College - Bellevue School of Nursing	-	-	-	Varies ^d	\$2,500	
Long Island University - (Brooklyn)	128	31	64 for Associates, 31 for Diploma	Varies	\$14,474	
Medgar Evers College	120	29	60	-	\$2,300	
NYC College of Technology	120	30	Up to 60	2 years	\$2,300	
New York University	128	Varies	Varies	Varies	\$19,328	
St. Francis College	128	30	30	Up to 5 years, part-time	\$8,820	
St. Joseph's College - Main Campus	128	31	-	-	\$7,257	
SUNY Health Science Center - Brooklyn	65	38	Up to 27	3 semesters	\$2,485	
Wagner College	-	-	-	-	\$16,290	
York College	-	-	-	-	\$2,456	
Average	118	34			\$7,292	
^a - Indicates that the information was not availab ^b Amount of time the program is designed to be a ^c Rates are for the all BSN programs within the s ^d Varies according to number of transfer credits	completed in for full-t	ime students who have m	et all prerequisites			

,	Гable В6. Over	view of AAS Prog	rams in Metrop	olitan New Y	ork		
School Name	Number of	Number of	Time to	Tuition	Nursing Career LadderEX-RN 2008		
	Required Credits ^a	Required Nursing Credits	Complete Degree ^b	(Semester)	Students Attempting	Number Passed	Passing Rate
Bronx Community College	67	30	-	\$1,575	50	43	86.0 %
CUNY Borough of Manhattan Community College	65	33	-	\$1,575	205	170	82.9 %
Hostos Community College	71.5	34	2 years	\$1,575	26	22	84.6 %
Kingsborough Community College	-	-	-	\$1,750	119	107	89.9 %
LaGuardia Community College	66	33	2 years ^c	\$1,575	129	113	87.6 %
Long Island College Hospital School of Nursing	68	41	2 years	\$5,357	52	44	84.6 %
Medgar Evers College	64	35	5 semesters	\$2,300	14	14	100.0 %
Monroe College	88	-	2 years	\$5,472	-	-	-
NYC College of Technology	67	36	2 years & 1 semester	\$2,000	107	97	90.7 %
Phillips Beth Israel	68	35	2 to 3 years	\$7,187	104	88	84.6 %
Queensborough Community College	66	36	5 semesters	\$1,575	142	127	89.4 %
St. Vincent's Catholic Medical Center of New York - Brooklyn & Queens	-	-	-	-	51	45	88.2 %
St. Vincent's Catholic Medical Center of New York - Staten Island	-	-	-	-	50	42	84.0 %
The College of Staten Island	64	34	-	\$2,300	152	122	80.3 %
Touro College	65	40	5 semesters	\$6,760	23	18	78.3 %
Average	68	35	-	\$3,154	87	75	86.5 %
			To	tal Students:	1224	1052	86 %

^a - Indicates that the information was not available on the program website ^b Amount of time the program is designed to be completed in for full-time students ^c 48 percent of students complete the program within 2 years



Organization	Program Description	Target Population	Cost (per person/per program)
Local NYC Center for Economic Opportunity/ Health and Hospitals Corporation	The Nursing Career Ladder initiative offers participants support as they complete their Bachelor of Science in Nursing (BSN) degree to become a registered nurse. Enrollees receive full tuition, books and counseling services, as needed, in exchange for participation in the program and a commitment of four years of employment with the Health and Hospitals Corporation (HHC). Paying positions at HHC start at \$61,528 for RNs and eligible participants should have strong academic skills.	Low-income and minority adults with a high school diploma	Total Program Cost: \$595,931 (including \$171,000 for administration /staffing costs) Per Participant: \$28,582 total clinical program \$10,593 total preclinical program Total: \$39,175
1199 SEIU	(1) Tuition Assistance Program (20,000 students per year) Provides funds for 6 credits per semester, or 9 credits per semester if in a nursing program. Students attending CUNY or SUNY schools are given vouchers to cover tuition costs, while students attending private universities are reimbursed. Students benefit from tutoring while in clinical nursing courses and union representatives will negotiate with students' employers for release time. 1199 emphasizes that their members need to continue earning a salary and maintain their benefits while in school. 1199 also provides remedial courses free of charge for students who are not academically prepared to begin college courses. (2) HC4 Program (3,000 students per year) Open to students who have passed the CUNY entrance exam, the health care college curriculum program offers 1199 members 9 preclinical nursing courses required by nursing programs, including English, Anatomy & Physiology, Psychology, and Sociology, in-house in 1199 facilities in Manhattan, Brooklyn, the Bronx, and Staten Island. Courses are taught by CUNY instructors. Lab courses are taught on CUNY campuses. As many interested students as possible are referred to this "gateway program." 1199 sees it as a cost saver over enrolling students in pre-clinical courses at CUNY. Most interested members are able to enroll in any course they like, although sometimes courses fill up quickly and some students may have to wait a semester to get into a course.	1199 members seeking the ADN degree and RN licensure (Note: all members are healthcare workers)	Per Participant per year: Part time: \$3,150 + fees + books Full-time: \$4,290 + fees + books Program operation costs and student supports are paid for by 1199 membership dues

Organization	Program Description	Target Population	Cost (per person/per program)
State			
Pennsylvania Higher Education	(1) Nursing Education Grants	Schools of Nursing	N/A
Foundation	The Foundation awards grant funds to non-profit public and private nursing schools operating in the state of Pennsylvania who will use the funds to:		
	 increase enrollment improve student retention improve licensure pass rates 		
	Schools can use the grants to complement existing recruitment, education and retention programs already in place.		
	(2) PA Nursing Assistance Fund		
	The fund will provide grant and scholarship monies to nursing students through the use of donations from individuals and organizations directed to Pennsylvania schools of nursing.	Nursing Students	
Commonwealth Corporation (Massachusetts)	Nursing Career Ladders Initiative (NUCLI) Funded in part by a \$2.9M US Dept. of Labor grant and \$8.9M from Commonwealth partners, NUCLI is described by Commonwealth as "a permanent, dynamic, and sustainable effort to increase the number of nurses working in Massachusetts." It's goals are:	Adults and youth interested in careers in nursing; some programs target specific subpopulations such as immigrants and low-income and minority adults.	Assuming 1400 total graduates, costs total approximately \$8,430 per student
	 Adding capacity to the state's nursing programs, which otherwise have to turn away qualified candidates, and Reducing the number of students leaving nurse education programs due to academic and personal struggles. Career Coaching to help individuals prepare for nursing degree programs 		
	Commonwealth reports that NUCLI has reduced the nursing shortage by increasing the number of graduates and improving the nurse education		

Organization	Program Description	Target Population	Cost (per person/per program)
	pipeline in Massachusetts. With partnerships created in four regions of the state, 823 graduated, 625 obtained RN licensure, and, 1013 individuals are in the pipeline. NUCLI also brought forward the nursing shortage as an issue and supported development of the Massachusetts Center for Nursing.		
Michigan Regional Skills Alliances (MiRSA)	 In 2005, the Michigan Regional Skills Alliances funded 24 partnerships between hospitals and colleges in cities throughout the state of Michigan. Funds ranged from \$119,812, to \$1,792,392 and colleges implemented programs that trained between 10 and 143 registered nurses, clinical nurse faculty and/or allied health trainees. Examples of these partnerships are as follows: Carson City Hospital, located in Carson City, was granted \$649,130 as part of a partnership with Montacalm Community College and West Central Michigan Healthcare MiRSA to implement an accelerated healthcare career-training program to train 20 RNs. Bay Regional Medical Center, located in Bay City, was granted \$119,812 as part of a partnership with Saginaw Valley State University and Michigan's East Central Healthcare Alliance to implement an accelerated healthcare career-training program to train 48 registered nurses and 1 clinical nurse faculty Providence Hospital, located in Southfield, and St. Johns Hospital, located in Detroit, were granted \$1,725,310 as part of a partnership with Oakland University School of Nursing in collaboration with the Southeast Michigan Long-Term Healthcare MiRSA to implement an accelerated healthcare career-training program to train 70 registered nurses. 	The program targets hospitals and is publically funded.	N/A
United Alliance Foundation	Health Alliance Program	The program targeted DC residents that have graduated	Cost per outcome per year: \$15,000 per student
(Washington, DC)	The program began in 2002 with a partnership between Providence	from a DC high school and	per year (UAF) + \$10,000

Organization	Program Description	Target Population	Cost (per person/per program)
	Hospital (PH) and the University of the District of Columbia, and was expanded to include a second partnership with Northern Virginia Community College (NOVA), in Annandale, VA, and Sibley Memorial Hospital in Washington, DC in 2003. Participants received free tuition, free books and a \$250 monthly stipend to cover transportation costs, along with counseling support, during enrollment in an ADN program. Requirements for continued program participation included: Passing the UDC entrance exam Maintaining a 2.5 cumulative GPA Participating in all UAF support service meetings (weekly individual counseling and monthly group professional development sessions) Completing clinical work once per week The program was discontinued due to a high attrition rate, resulting from a academically underprepared students. It accepted its final cohort of new applicants in 2004 and continues to support the remaining 2 students through the completion of the BSN degree. Of 60 students matriculating, two have graduated and are employed as RNs at Providence Hospital. Program funds were provided by the UAF, through grants from two foundations and a federal grant, and Providence Hospital provided \$10,000 in tuition support annually.	come from a low-income background.	per student per year (PH) = \$25,000 per student per year Total cost per outcome= \$100,000 over four years
Greater New York Hospital Association Foundation	New York Ladders in Nursing Careers: Project L.I.N.C. In 1988, the Greater New York Hospital Association Foundation, in collaboration with other organizations, created Project L.I.N.C. The program, which lasted three years, offered financial resources and other support services to 442 health care workers to enable them to enroll in LPN, ADN, and BSN programs. The program completion rate was 93.2 percent, with 67 participants completing an LPN program, 265 completing an ADN program, and 79 completing a BSN program. Ninety percent of program participants passed the licensure exam.	Healthcare Workers	Total Program Funding: \$7.9 million from state agencies, participating institutions, unions, and private foundations, including Robert Wood Johnson

Robert Wood Johnson Foundation & Various Organizations (Texas) Robert Wood Johnson Foundation & Various Organizations (South Carolina Project L.I.N.C. Between 1993 and 1997, 227 students had graduated by 1997. All graduates organization to work, receiving signific represented at least 32 percent of enrothe grant. Maryland Higher Education Commission State Nursing Scholarship Both undergraduate and graduate nurs are contingent upon an agreement to s approved Maryland health facility upon the student Assistance Commission State Nursing Scholarship Indiana Student Assistance Commission State Nursing Scholarship In exchange for full tuition candidates within a state health facility after grad		Target Population	Cost (per person/per program)
Johnson Foundation & Various Organizations (South Carolina) Maryland Higher Education Commission State Nursing Scholarship Both undergraduate and graduate nurs are contingent upon an agreement to s approved Maryland health facility upon the student Assistance Commission State Nursing Scholarship State Nursing Scholarship Both undergraduate and graduate nurs are contingent upon an agreement to s approved Maryland health facility upon the student Assistance Commission Indiana State Nursing Scholarship In exchange for full tuition candidates	pants had enrolled in the program;	Healthcare Workers, particularly minorities	Total Program Funding: \$542,798 from RWJF, supplemented by fundraising efforts at each project site across the state
Higher Education Commission Both undergraduate and graduate nurs are contingent upon an agreement to s approved Maryland health facility upon the student Assistance Commission State Nursing Scholarship In exchange for full tuition candidates	returned to their sponsoring cant pay raises. Minorities	Healthcare Workers, particularly minorities	Total Program Funding: \$542,395 from RWJF; additional support was received in services from South Carolina Educational Television, as well as \$200,000 annually from the Duke Endowment and about \$74,000 annually from the Fullerton Foundation
Student Assistance Commission In exchange for full tuition candidates	erve professionally within an	Requirements for the award are: proof of state residency & a consistent 3.0 GPA.	Tuition and mandatory fees up to \$3,000 per year
		Requirements for the award are: proof of state residency, economic need & a 2.0 GPA.	Tuition and mandatory fees up to \$5,000 per year
National US Department of (1) Nursing Scholarship Program:		US citizens or nationals	Total Per Student Per

Organization	Program Description	Target Population	Cost (per person/per program)
Health and Human Services /Health Resources Services Administration (HRSA)	In exchange for at least two years service at a health care facility with a critical shortage of nurses, the pays: • tuition • required fees • other reasonable costs, including required books, clinical supplies, laboratory expenses, etc. • monthly stipend (\$1,269 for the 2009-2010 school year)	enrolled or accepted for enrollment in a full or part time nursing training program who are: • free from any Federal judgment liens • free from existing service commitments • not delinquent on a Federal debt	Year: Full college tuition and fees plus \$12,690 annually
	(2) Scholarships for Disadvantaged Students The Scholarships for Disadvantaged Students program provides scholarships to full-time, financially needy students from disadvantaged backgrounds, enrolled in health professions and nursing programs. Participating schools are responsible for selecting scholarship recipients, making reasonable determinations of need, and providing scholarships that do not exceed the cost of attendance (tuition, reasonable educational expenses and reasonable living expenses).	Schools of Nursing at Colleges and Universities	
	(3) National Health Services Corp The National Health Services Corps was founded in 1972 for the express purpose of giving medically disadvantaged communities access to well-trained health professionals, including nurses. The NHSC Scholars program provides full repayment of student loans in return for service in "medically underserved" areas.	Registered Nurses	

Organization	Program Description	Target Population	Cost (per person/per program)
National Student Nurses' Association	With support from Johnson & Johnson, the organization offers undergraduate scholarships in areas where there is a recognized shortage of nursing professionals.	Eligible students must be enrolled in a state-approved nursing program, demonstrate financial need and academic achievement, and enrolled at least part-time.	\$1,000-\$5000 per year
National Black Nurses' Association	The association offers scholarships to qualified members enrolled in nursing training programs throughout the US.	Eligible students must be a member of NBNA and a local chapter and have at least one year of school remaining	\$500-\$2000 per year
National Association of Hispanic Nurses	The association offers scholarships to qualified members enrolled in nursing training programs throughout the US.	Eligible students must be a member of NAHN and have at least one year of school remaining	\$1,000 per year
Robert Wood Johnson Foundation	Robert Wood Johnson Foundation Nurse Faculty Scholars To help talented junior nursing faculty advance in their careers by giving them the opportunity to develop a research program and participate in other scholarly activities; engage in institutional and national mentoring, leadership training, networking among scholars and colleagues in nursing and other fields; and have protected time to gain the critical skills needed for a successful career in academic nursing.	Graduate Nursing programs	15 awards of \$350,000 over three years
Other Various Local and State Organizations Providing Individual Nursing Scholarships	MinorityNurse.com Scholarship listings According to the Minority Nurse website, "Scholarship money abounds for students pursuing undergraduate or graduate education in nursing. All awards have various criteria for recipients, which may include financial need, academic achievement and involvement in community	Minority nursing students	varies

Organization	Program Description	Target Population	Cost (per person/per program)
	service. In addition, some awards require the recipient to work in a specific location-often a medically underserved area-after graduation."		