



Promoting Nursing Workforce Diversity on an Urban Campus

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Abstract: The Nursing Scholars Program at the University of Massachusetts Boston's (UMass) College of Nursing and Health Sciences (CNHS) promotes enrollment, retention, and post-graduation success for minority and economically disadvantaged nursing students. As discussed below, this is a federally funded HRSA Workforce Diversity grant. The program consists of many activities: peer group meetings, community-based cultural competency trainings, leadership education, program advisors, a community space, laptop computers, ESL classes, tutors, and scholarships or stipends for eligible students. This article is intended to provide an overview of our methods and practices, how we incorporated student feedback into our model, and our unique approach to outsourcing evaluation (singled out by HRSA as a particular strength of our grant proposal), as well as our recommendations to others considering a similar model.

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COMMUNITY NEED

The Nursing Scholars Program exists to fill a documented need in both the medical and academic communities.

Minorities are underrepresented in the nursing profession. Despite the fact that minority groups comprise almost 33% of the U.S. population, only 12.3% of registered nurses represent racial or ethnic minority groups.¹ In nursing programs in Massachusetts there is a tremendous lack of minorities enrolled and graduating. In fact, "At Boston hospitals up to 95% of house-keeping staff and 80% of food services workers are minorities. But the number of registered nurses who are minorities is less than 10% in most institutions."² And even though CNHS has a much higher rate of minority enrollment, as well as a higher rate of minority graduates, than the rest of the state, its enrollment still does not adequately reflect the diversity of minorities in the local community.

To make matters worse, in 2005 Massachusetts had a shortfall of 4,820 nurses, or 7%. By 2010 this shortfall is projected to reach 12% and to continue growing.³ This shortage is different from past nursing shortages, because the workforce is getting older, thereby shrinking the overall workforce as they retire.⁴ At the same time, young people are choosing not to enter the

nursing profession because they have better career options. For current nurses, there are a number of workplace problems including excessive workloads, inadequate staffing, and workplace safety issues.⁵ All of these factors will contribute to a shortage of nurses in the Boston area for the foreseeable future.

Retention rates for minority students at CNHS lagged behind those for white students from 2000 to 2004, with rates for minorities hitting a low of 51% in 2001-2002.⁶ In the past, NCLEX passing rates for whites overwhelmed the scores of all minorities with only 8% of whites failing the examination.

Faced with this community need—the documented nursing workforce shortage, under-representation of minorities in the nursing community, and lagging NCLEX passing and retention rates of minority students at UMass—we applied for and received funding from the United States Department of Health and Human Services Health Resource and Services Administration (HRSA) Bureau of Health Professions Nursing Workforce Diversity Program for two grants. The first was the Bringing the Best to Nursing (BBN) Program (2003-2006), and our current grant is the Nursing Scholars Program [NSP] (2007-2010).

HRSA FUNDING

We are now in the process of administering our second HRSA-funded Nursing Workforce Diversity Grant. Bringing the Best to Nursing ran from 2003 to 2006 and enrolled 114 students. To date, 50 BBN stu-

¹ Baldwin, D. (2003, January 31.). *Disparities in Health and Health Care: Focusing Efforts to Eliminate Unequal Burdens*. Online Journal of Issues in Nursing, Vol. #8 No. #1.

² Rowland, C. (2006, August 5.). Hospitals Move to Boost Skilled Workers, *Boston Globe*.

³ Ensuring an Educated Nursing Workforce for the Commonwealth, Massachusetts Association of Colleges of Nursing (MACN). (2005).

⁴ Sroczyński, M. (2003, January.). The Nursing Faculty Shortage: A Public Health Crisis, The Nursing Career Ladder Initiative. NUCLI State Advisory Committee.

⁵ Massachusetts Colleagues in Caring Collaborative. (2002). The 2001 Massachusetts Workforce Survey-Executive Summary.

⁶ UMASS. The Office of Institutional Research and Policy Studies. (2004). *One Year Retention Rates for Fall Entrants 1998-2004 Cohorts*.

dents have graduated, which is a 100% retention rate. Among the other documented successes of the BBN program are the “culture of community” noted by students as being essential to improving academic experience, retention and performance; the “advocacy model” of advising, where students appreciated faculty attention and assistance; and the Diversity Training Workshops, led by minority nurses.

The Nursing Scholars Program received its HRSA funding in Fall of 2007. Twenty-one students were enrolled in Fall 2007, and 30 in Spring 2008. The objectives of the Nursing Scholars Program are as follows:

1. Improve access to the nursing profession for disadvantaged students and underrepresented populations;
2. Increase culturally responsive, excellent health care by diverse nurses to diverse populations;
3. Demonstrate the efficacy of a rigorous student nurse retention program that is framed by a “Culture of Community” learning model;
4. Enhance faculty knowledge and sensitivity around cultural competence, student support, and diversity in underrepresented, at risk students;
5. Collaborate with Health Careers Opportunities Program at UMass to introduce Nursing as a career to minority children and their families;
6. Provide stipends, scholarships and laptop computers to students to introduce computers into their education.

The Nursing Scholars Program grew out of lessons learned from the BBN grant. NSP participants are recruited from the cohort of incoming CNHS students as well as from current CNHS freshmen and sophomores. NSP students need to meet the requirements of the college for acceptance into nursing school and must be in the Bachelor of Science degree program. Stu-

dents accepted into the school have at least a 2.75 GPA and have passed the TOEFL (English Proficiency) examination. Graduate students and students who are registered nurses (RN) who have returned to get their baccalaureate degree are not included. Students may enter NSP at any time after completing their pre-nursing courses (sophomore year for undergraduates and upon entry for transfer students). Thirty new students are accepted into the NSP each semester. They formally attend the program for three semesters and receive support from the program until they graduate.

In order to join the program, students submit their most recent transcripts and complete a two-page NSP application, which is then reviewed by the NSP Enrollment Committee. The Committee includes the Program Director and the Faculty Advisors. The application requires an essay on nursing goals and a short essay on how NSP will benefit the student and what the student will bring to the program. Students at greatest risk of not completing the degree and/or not passing their board examination are given first priority for inclusion in the program. The Committee evaluates the student’s risk by ranking factors collected in the application, such as obligations outside of the program, English language skills (ESL/writing proficiency exam), grade point average, financial stressors, etc. The resulting index is then monitored and evaluated through our database on a semester-by-semester basis, and as the need is otherwise determined, in order to ensure that adequate support is given to this population of students. All students must be minority and/or economically disadvantaged per the federal definitions accepted at the time of enrollment into NSP. All applicants must verify possession of a visa permitting permanent residence in the United States; or prove they are U.S. citizens, non-citizen nationals, or foreign nationals.

The panel also looks for a student’s in-

terest in serving an area that is experiencing the most critical nursing shortages, such as working with minority populations or in long-term care. Following is the order of priority for NSP enrollment:

- Minority/economically disadvantaged (requirement);
- Identified as at-risk (as ranked by Committee);
- Nursing goals (subjective, with areas in most critical need to receive priority);
- Obligations outside of school;
- ESL exam and English skills.

NURSING SCHOLARS PROGRAM (NSP)

The program is based on a small learning community model. Once accepted into the program, all NSP students are assigned to one of the four NSP advisors, whom they are required to see once a semester, and to stay in touch with by phone or email at least once a month. The advisors are dedicated members of the CNHS faculty who serve students in addition to the students' university advisor. The NSP advisor assists with class schedules, time and life management issues, planning for NCLEX, navigating UMass administrative systems, and other issues that affect the students' ability to succeed at UMass. Advisors also help students close to graduation on professional development, networking, and other job search issues. Advisors keep written records of meetings with students and enter them into our database to track effectiveness of the program. This database will have the functionality of e-mailing students a detailed report of topics discussed during the advising session and action items for the student. These reports are also used to keep students accountable for their academic and professional development. The advisors work with the advising coordinator to identify problems early so that stu-

dents can find support in overcoming whatever challenges they face.

Feedback from BBN students found BBN advisors to be much more responsive to student needs than university advisors. BBN advisors were able to make an impact because they were CNHS faculty and because students were more comfortable with them than with someone who functions more broadly as an academic advisor. BBN advisors also actively pursued relationships with students, assuring students that they were not only a problem-solver but also a means of support. They also made themselves more available to visit with students.

PEER GROUPS

Peer groups are held each month. Each NSP student is assigned to a group of 8-10 students. Attendance is required and is recorded, as are topics discussed. Faculty members in charge choose the topics to be discussed. Peer Group Leaders meet regularly to identify what issues are relevant to the students, what is going on in specific groups, and what strategies are working within the groups. During the NS senior year, peer groups transition to optional student-led groups. The data from this regular forum are used to capture, analyze, and incorporate feedback from participants into the ongoing enhancement of the program.

TUTORING

Graduate and peer tutors are available to students to assist with homework and exam preparation. Students are referred by their advisor for tutoring or they request it based on their own perceived needs at any time. Tutoring sessions are coordinated by a CHNS faculty member who assigns an undergraduate work study peer tutor. An indicator is placed in the database upon each tutorial visit to provide a basis of com-

parison between students who take advantage of tutoring and those who do not. Analyses will be run using the risk index and GPA alone on a per semester basis. The assumption is that students who avail themselves of tutoring and other forms of academic support will perform better and be at a lower risk for attrition and poor NCLEX performance.

SEMINARS

Students in the NSP have the opportunity to attend an ongoing seminar series that focuses on six topics: Study Smarter Not Harder, Quick Relaxation Tools for Nurses, Stress Resiliency, Effective Communication, Caring for the Caregivers and Resonant Leadership for Nurses. These seminars focus on developing leadership and study skills and addressing the general issues faced by the NS students, as identified in pilot BBN focus groups. The seminar series was developed by a nurse who specializes in presenting workshops nationally on stress reduction and effective study habits. The seminars are held several times, at different times during the day and on different days of the week to ensure that students will be able to attend. All seminars are evaluated by students through written surveys and during peer group discussions.

COMMUNITY MENTORS

Students are matched with a mentor in the nursing field who can give advice and career guidance. Mentors have a broad array of skills and experiences because of the nature of health care in Boston. For example, students might be matched with nurses who specialize in community settings, academic settings, or nurses who have expertise in a particular immigrant population. The mentors include minority nurses and nurses who are multi-lingual.

This program is coordinated by a graduate assistant who works in conjunction with the Faculty Coordinator. NSP staff has developed a roster of enthusiastic and committed nurse mentors from community hospitals including Massachusetts General Hospital, Caritas St. Elizabeth's Medical Center, and the Dana-Farber Cancer Institute. A written agreement signed by the two parties ensures understanding of expectations from the outset of the mentorship. Success of the mentoring partnership is measured by the objectives met as described in this agreement. Our database tracks the impact mentoring relationships have over the long-term in regard to employment, salary and career development.

This program component also figures prominently in the monthly peer group meeting discussions. Talking about the mentoring experiences allows discussion leaders to offer tips and techniques on getting the most out of the mentoring relationship. These discussions may also encourage other students to pursue a mentoring relationship.

ENGLISH AS A SECOND LANGUAGE (ESL) CLASSES

Lack of English language skills is at the root of many of the issues being faced by nursing students. English is not the first language for the majority of CNHS students. ESL coaches, students who are further along in the program and speak the same language as the students to whom they are assigned, assist students with their school work and other issues. Coaches meet weekly with students and are supervised in monthly meetings by ESL Faculty at UMass.

COMPUTERS

Students are loaned a laptop computer and a printer for personal use during their

enrollment in the program. CNHS currently has 40 computers and printers that were used as part of BBN. These computers were upgraded and are now used as part of the NS program.

Since knowledge and competence of computer operation is standard in the medical field, providing this technology and training helps students who are not computer literate feel more comfortable using the computers. Individuals who already are computer literate have the opportunity to refine their skills. The computers are equipped with a wireless card for Internet access, Microsoft Office software, and NCLEX and Medical Terminology software with an instructional CD-ROM. Classes are available at the start of each semester for the students to be trained in use of this software. Additional support is available through the CNHS library, where training modules are available, and through a variety of the CNHS courses that enhance computer skills.

STIPEND

NSP participants receive either a stipend or a tuition waiver of \$800 per semester, for up to three semesters of the program. To qualify, students must remain in the NSP program and meet the income guidelines according to the definition of economically disadvantaged students provided by the U.S. Bureau of Census at the time of application. All students receive the same amount whether it is a stipend or a scholarship. All students who receive the stipend or scholarship must be enrolled on a full-time basis.

While students are not required to detail where the funds are spent, this information is asked informally using an on-line student reporting tool, as well as during peer group sessions. Data that are gathered through these methods are tracked in the database in order to assess the impact on

the risk index and other important persistence predictors.

PRE-ENTRY PREPARATION PROGRAM

NSP has created a nursing education pipeline from middle school through graduate school by providing nursing-specific outreach to middle and high school students through the UMass Health Careers Opportunity Program (HCOP). Each year HCOP serves approximately 300 middle and high school students enrolled in the UMass Pre-Collegiate and Educational Support Programs: Urban Scholars, Upward Bound, Math Science Upward Bound, Project REACH, Admission Guaranteed, and GEAR-UP. All HCOP activities are designed to encourage economically and educationally disadvantaged Boston Public School students to pursue a career in a health profession.

To attract students, HCOP disseminates program information to parents, teachers, guidance counselors and other personnel at the target middle and high schools, to community groups and agencies and through direct mailings to students and parents. Interested students are invited to general information sessions hosted by HCOP. Among those who participate, HCOP identifies and recruits students interested in nursing.

NSP provides support within all HCOP programs, which are organized around three main areas: early awareness, preparation and planning, and facilitating entry. HCOP's early awareness activities introduce about 300 students per year to information about the wide variety of jobs in the health and public health fields. HCOP offers after-school and summer academic classes and tutorial support to ensure that the pre-collegiate students have a strong foundation in subjects required for a nursing (or other health-related) degree such as

math, science, and critical thinking.

In addition, HCOP will convene a Nursing Careers Club in which 20 students in grades 10-12 meet two times a week after school. Students receive tutoring, take field trips to health-related organizations, research nursing careers, receive CPR training, present their findings to peers and parents, and are matched with a current NS student mentor. Students in the club receive weekly stipends of \$25 for attending the club. Parents are encouraged to be involved with their children's pursuit of the nursing career and are regularly invited to attend club events and activities. With the support of HCOP and to facilitate the transition from secondary to higher education, each club member participates in individualized college advising and awareness activities. Students learn about higher education, the college admissions process, and financial aid through presentations by university departments, guest speakers, college recruiters, seminars, college visits, and one-on-one advising. HCOP staff work with students and parents to oversee the students' admission process in partnership with the NSP. HCOP participants who matriculate at CNHS are guaranteed admission into the NSP.

NSP/BBN

Through the experience of administering our BBN, we learned a number of lessons and valuable principles which we have subsequently applied to the NSP. For example, we kept the advising advocacy model, the monthly peer groups, the peer tutoring, and the small community learning model. In addition, the ongoing facilitation of peer support, the culture of community throughout, and the physical aspects of the program—the university space, lounges, NSP office, and computers and training—are all components of the BBN program which we have maintained.

However, many things have changed. The youth program component (the partnership with the HCOP), seminar series, and optional mentoring with community mentors are new additions to the program, and we have developed stronger outcome monitoring, training, tracking and technical assistance with help from our evaluation consultant. Additional programmatic changes are made each year based on actual outcomes.

DATA MANAGEMENT AND MONITORING

NSP is constantly working to collect data that will improve the effectiveness of the program. Our evaluation methods and data collection allow us to identify which elements of the retention activities are delivering the highest benefits to our students, thereby enabling us to find better ways to serve disadvantaged students. By highlighting the components of our program that are working best and by providing specific cost data on the delivery of these components, we can work with the CNHS to integrate these methods into the college. This is being done with the support of the school since the pilot BBN was viewed as fertile ground for fostering innovative strategies and developing a vital learning community for our future nurses. As NSP progresses, the successful aspects will be integrated into the university, after federal funding ends in 2010.

An outside consultant has designed and implemented a database system and trained NSP staff on its use. Additionally, NSP is provided with ongoing maintenance, training, and technical assistance. The result is an outcome-based monitoring cycle integrated with the UMass mainframe, which collects in-depth and focused information about NSP students, their activities and experiences. NSP faculty members now have data at their fingertips when

making important programmatic changes, adjustments and implementations.

Data will be reported in weekly, monthly, semester, annual, and longitudinal reports. Graduates of the program are followed closely at one, three, and five years post-graduation.

SUMMARY

Over 70 BBN program graduates are currently working as nurses, primarily in urban areas with high minority and economically disadvantaged populations. In the next two semesters BBN students will continue to graduate and join the workforce. After funding for the Nursing Scholars program ends, CNHS is committed to incorporating proven successful methods into the overall nursing program. As NSP's racially and economically disadvantaged candidates graduate and become nurses, the program will be shown to have provided a diverse nursing work force and to have assured that a supply of nurses is available to minority patients in Boston. NSP will further graduate nurses who can ensure quality of care to these populations and improve the public health and health care system by providing an efficient and effective nursing workforce.