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FINAL PERFORMANCE REPORT

OCCUPATIONAL HEALTH PROGRAM

UNIVERSITY OF PENNSYLVANIA

SCHOOL OF NURSING

PHILADELPHIA. PENNSYLVANIA 19104-6096

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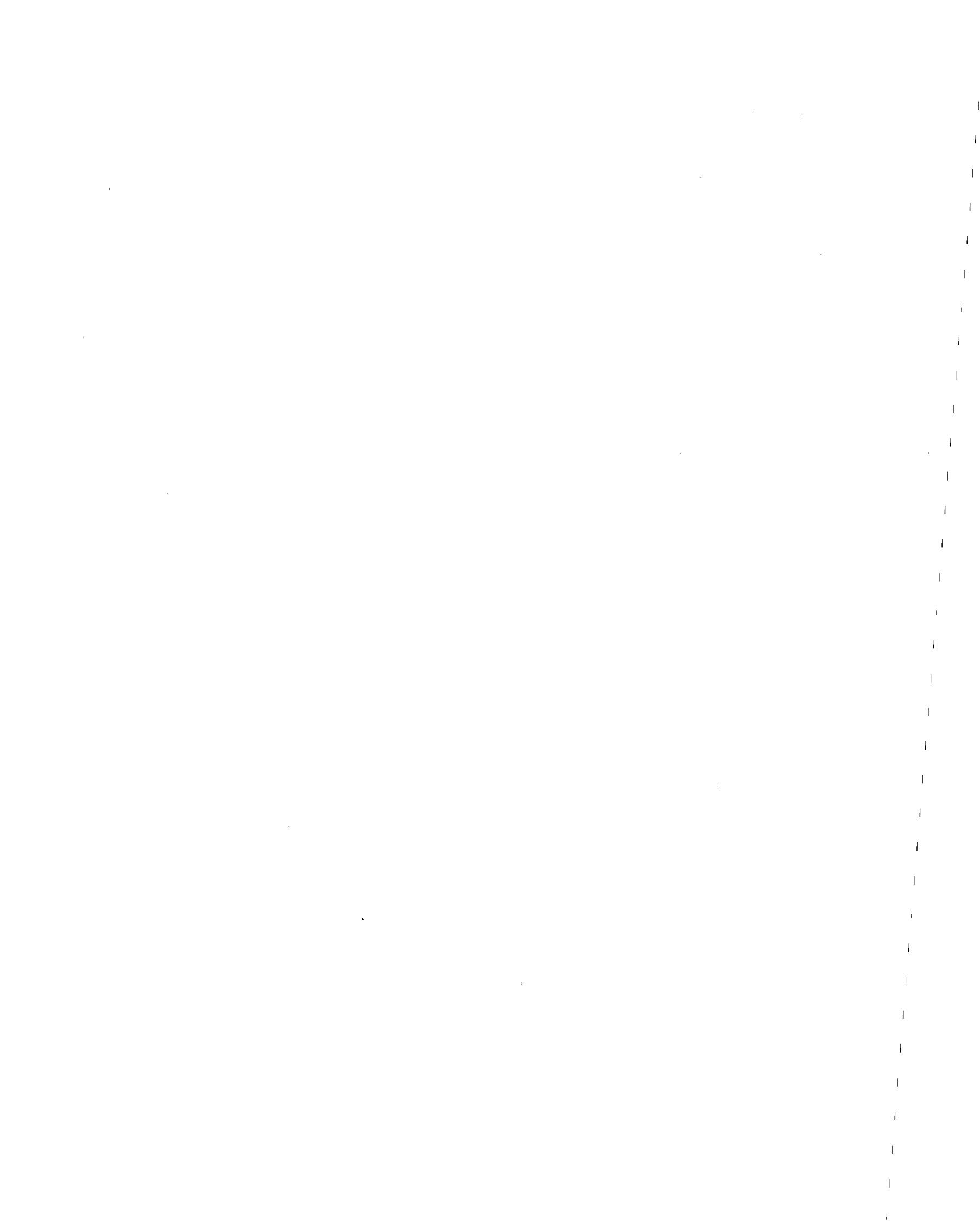
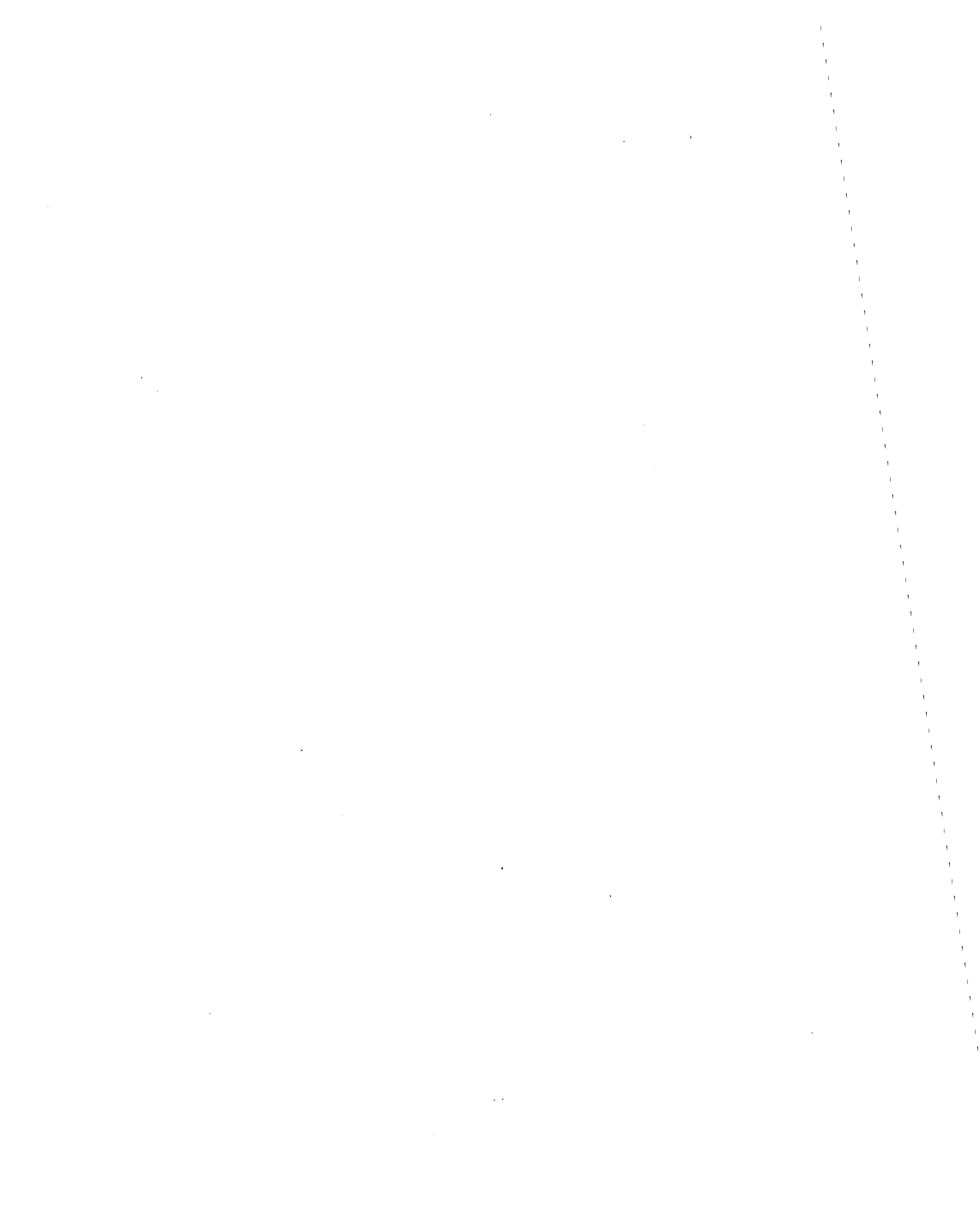


Table of Contents

Title page.....	1
Table of Contents.....	2
Abstract.....	3
Significant findings - Summary of training activities....	4-6
Body of report with conclusions	
Overview of activities during grant reporting period	
Purpose and program characteristics.....	7-8
Training objectives and goals.....	9
Body of report with conclusion - continued.....	10
Model internship development.....	11
International initiatives.....	12-13
Research program.....	13
Smithsonian Institution exhibit.....	13-14
Curricular improvements.....	14-17
Faculty strenght.....	17-19
Rcruitment.....	19-20
Appendices	
List of Occupational Health Graduates 7/1/94 - 6/30/97....	21



ABSTRACT

The University of Pennsylvania School of Nursing Occupational Health Program enrolled its first students in 1986, graduating the first masters prepared nurse in 1987. With the assistance of the National Institute of Occupational Safety and Health (NIOSH), this graduate level occupational health program has graduated forty highly qualified occupational health nurses. During this grant period, July 1994 through June 1997, eighteen occupational health nurses graduated from one of the two major options offered through the occupational health program. The Primary Care Option prepares adult nurse practitioners in occupational health who can be certified by both the state of Pennsylvania and the credentialing body of the American Nurses Association. The Administration/Consultation Option prepares occupational health nurses who can develop and manage occupational health programs at the executive level. The objectives and goals of the educational program have been to enhance the health of individual workers, the aggregate work force as well as provide the business community with excellent occupational health care professionals. Students must complete four semesters of course work which contains ample clinical practice. Major accomplishments during this reporting period, in addition to the training of eighteen occupational health nurses, include the development and implementation of the Administration/Consultation Option's MSN/MBA option with the Wharton School, the development of a model regional OSHA internship and its successful completion by two students, development of international occupational health initiatives, greater interdisciplinary and outreach efforts, a beginning research program in the health of health care workers and an exhibit at the Smithsonian Institute featuring the origins of American public health nursing. Improvements in the curriculum and faculty strength plus recruitment efforts have also been achieved.

Significant Findings -- Summary of Training Activities

Major Accomplishments

1. Eighteen occupational health nurses graduated during this grant reporting period. Sixteen graduated from the Primary Care Option and two graduated from the Administration/Consultation Option.
2. The Administration/Consultation Option received full School of Nursing approval in the Fall of 1993. Open advertisement of this option could not take place until there was full approval from the school. Once this occurred, publications were disseminated with option and course information. After formal approval and recruitment, the MSN/MBA dual degree option with the Wharton School of Business was incorporated into the Program and advertised. One student is currently enrolled in this option.
3. A regional OSHA internship was developed as a model program for the nation. The Occupational Health Program has had a long standing relationship with the Office of Nursing in Washington D.C. Both the Occupational Health Program faculty and the members of the Office of Nursing wanted to create an experience for students with regional OSHA offices.
4. International initiatives focusing on occupational and environmental issues have been developed by Occupational Health Program faculty. International activities have included educational exchanges and beginning work toward greater student involvement with plans for an international elective.
5. The Occupational Health Program has expanded interdisciplinary and outreach efforts with educational, business and government entities in the area. Interdisciplinary activities have included relationships with regional institutions, curriculum expansion, an internship and fellowship, labor interactions and clinical opportunities. These activities have been in addition to international efforts which have incorporated an interdisciplinary agenda.
6. A beginning research program directed toward the health of health care workers has been opened at the School of

Nursing through the Center for Health Care Policy Research.

7. An exhibition at the Smithsonian Institution was developed by Karen Buhler-Wilkerson. The origin of American public health nursing was depicted in both written and photographic form. Occupational health nursing began as home care. This exhibition offered all visitors the opportunity to learn about public health nursing, home care and the manner in which care was provided during the late eighteen hundreds and early nineteen hundreds in the United States.
8. Improvements in the curriculum are ongoing and include the continuation and expansion of projects and programs and the development of educational opportunities. Highlighted improvements in addition to those discussed above include the following.
 - a. Distance learning is planned for the Occupational Health Program as support is generated.
 - b. Evaluation of the program is accomplished through a University wide process, School of Nursing process and Program process. The Occupational Health Program has once again achieved high rankings in all three of these areas.
 - c. Each year Program students visit Washington D.C. as part of their course work. The trip is designed to foster maximum exposure to occupational health information, professionals and agencies. Federal OSHA and NIOSH are among the agencies visited during this two day trip. This trip is sponsored through NIOSH funding. It is considered by all students to be one of the most important experiences in the program.
 - d. The Primary Care Option, within the program, educates adult nurse practitioners. Each student has the option of extending their education to include family nurse practitioner preparation.
 - e. Clinical site development continues on a regular basis. Agencies supporting clinical practice for the Program are located in Pennsylvania, New Jersey and Delaware. The clinical sites are as diverse as occupational health and include corporations, hospitals, entrepreneurial businesses and government.

- f. Occupational Health course development and the refinement of both the Primary Care Option and Administration/Consultation Option are ongoing. Epidemiology is taught by an epidemiologist recently appointed to the standing faculty. Occupational health objectives, projects and readings continue to be incorporated within both the didactic and clinical objectives of the Primary Care and Administration courses. An elective called "The Business of Nursing" has been added and is highly recommended for all Program students.
9. Faculty strength has been enriched by the appointment of Karen Buhler-Wilkerson as Program Director of the Occupational Health Program. Improvements have also been achieved by the addition of skilled contributors and growth of existing members. Eileen Sullivan-Marx has assumed the coordinator position for the Primary Care Option. Jennifer Pinto Martin, an epidemiologist, has joined the faculty as previously discussed.
10. Recruitment has been and continues to be a major focus in the program. Graduate Education Days continue to be a major recruitment tool. Two Graduate Education Days have been held each year during this grant period. Additional recruitment efforts have focused on visiting lectures in other programs, interactions with both the local and national occupational health nursing associations and interactions with corporate and health care entities. Much interest has been stimulated in the Program. Efforts are ongoing and aided by the interdisciplinary and outreach efforts of the Program faculty.



Body of Report with Conclusions

Overview of Activities During Grant Reporting Period

Purpose and Program Characteristics

The Occupational Health Program at the University of Pennsylvania School of Nursing prepares post-baccalaureate nurses to practice as masters prepared occupational health nurses who are able to care for and promote health in the American workforce. The primary focus of educational goals and objectives has been to enhance the health of individual workers, the aggregate work force and provide the business community with excellent occupational health care professionals. The primary purpose of this training grant was to maintain an existing program in Occupational Health Nursing (OHN) at the masters level at the University of Pennsylvania. Nurses matriculating into the Occupational Health Program can choose to enter the program in one of the two educational options, Administration/Consultation or Primary Care.

The Administration/Consultation Option emphasizes management, program development, surveillance methods and health policy. This macro approach enables nurses to assess the needs of aggregate employee populations, target, prioritize, and develop programs and affect policies for company-wide implementation. Management and consultation skill necessary in developing and administering programs are critical outcomes gained. Two courses of study reflect an administration and consultation focus: MSS as an occupational health nurse administrator and consultant with a secondary concentration in business; and MSN/MBA dual degree, as an occupational health nurse administrator (School of Nursing) and business major (Wharton School). Graduates of these courses of study are eligible for ANA Certification in Nursing Administration.

The Primary Care Option stresses the diagnosis and treatment of people at risk for occupationally related disease, disability, injury or lifestyle hazards. This micro approach emphasizes primary care of employees addressing prevention, wellness, acute and chronic illnesses and injuries, exposures, and functional limitation. The Occupational Health Primary Care Option leads to an MSN as an occupational health nurse practitioner with either adult or family preparation. Graduates of the option qualify for

state certification as nurse practitioners (CRNP) and are eligible for ANA certification as nurse practitioners.

Plant walk-throughs, field trips and planned interchanges with occupational health experts in a variety of specialties supplement the active classroom and seminar instruction. Ample clinical practice and beginning research endeavors are available. Students have a guided exploration of health care in industry and are exposed to business culture and its effect on health care.

Graduates of the Occupational Health Program's Primary Care option are cost effective well-prepared nurse practitioners who will provide occupational and primary health care in industry, clinics and private practice. Occupational Health Program graduates from of the Administration/Consultation Option, will be prepared for employment as corporate directors, supervisors and consultants. Graduates of both program options are assisted in meeting requirements to sit for certification in occupational health nursing (COHN).

Training Project Objectives and Goals

- Training project objectives and goals were unchanged throughout the project period. The primary objective for the project has been to maintain the Occupational Health Nursing Program in the School of Nursing at the University of Pennsylvania. There have been ongoing activities associated with this objective that have occurred annually. They have been as follows.
- Recruit eligible students and provide academic advisement for their matriculation into and through one of the two options, allowing them to complete their education in an efficient, productive manner
- Conduct classroom and clinical teaching by integrating material into existing courses, updating content, coordinating clinical placements with individual needs and providing surveillance over classroom activities
- Recruit and train clinical preceptors
- Conduct systematic valuation of students, course work, faculty, program and graduates
- Maintain and build community relationships and resources in order to conduct the program and capitalize upon opportunities that are mutually beneficial
- Maintain and convene the Occupational Health Nursing Advisory Board
- Maintain the integrity of the program within the Graduate Program and the School of Nursing
- Prepare reports, proposals and other written materials to maintain and build the Program and to meet obligations required by the grant project

Body of the Report with Conclusions - Continued

Student Training

- During this grant period, July 1994 through June 1997, eighteen occupational health nurses graduated from one of the two options offered through the occupational health program. Sixteen graduated from the Primary Care Option. Of these graduates, thirteen were adult and three were family prepared. Two graduates completed the Administration/Consultation Option and one student enrolled in the MSN/MBA Option. The MSN/MBA Option is intended for nurses with previous management experience who are preparing for senior management positions. Applicants apply to both schools and must be accepted into both programs of study.
- All graduates received some form of support through this NIOSH training grant. Partial tuition support was received by half of these graduates. Due to the expense of the University of Pennsylvania academic programs and limited tuition support most students attend school on a part time basis. Some students have chosen to work full time or part time depending on the amount of tuition support offered by employers. Often students must agree to an indentured period if tuition support is received.
- Students wishing to enter the Occupational Health Program must meet all School of Nursing requirements. There are four routes of entry into the Master's program: (1) directly, from a national league for nursing accredited baccalaureate program, (2) matriculation as an undergraduate for specific course work, (3) matriculation in a combined BSN/MSN program, and (4) as a post MSN student. Two graduates during this grant period completed their course of study as post MSN students. One graduate also completed an OSHA Internship in Washington D.C. as a post masters student. A list of graduates from the grant reporting period is included in the appendices. The Program has received more inquiries and enrollment for the Occupational Health Primary Care Option. Job opportunities for nurse practitioners in occupational health have routinely exceeded those for Administration/Consultation graduates. All Program graduates have occupational health position opportunities.

Model Internship Development

- A new and innovative nurse internship and fellowship has been developed with the Philadelphia Area OSHA Office in conjunction with the Office of Occupational Health Nursing, OSHA in Washington D.C. This program will offer a graduate clinical rotation option or post master's fellowship. The office of Occupational Health Nursing in Washington intends to use this program as a model throughout the nation. We believe students choosing this opportunity will profit greatly by improving their knowledge of OSHA, occupational policies and hazard control. Additionally, OSHA representatives will gain knowledge of the range and depth of educational substance and experience of graduate prepared occupational health nurses.
- To date, two Occupational health nursing students have completed this semester long Clinical program. The Philadelphia Area Director and both students have been extremely satisfied with the internship. Projects of import and assistance were completed by each student during their respective internships. The program has been so successful, a third student is currently involved with the OSHA internship in the Philadelphia Area Office.

International Initiatives

- Global occupational and environmental concerns and international efforts addressing them, are a focus of the Occupational Health Program at the University of Pennsylvania. Student participation is planned as plans continue and funding is generated.
- As part of a USAID grant with the Clinical Center at Thomas Jefferson University, Kay Arendasky, Program Manager for the nursing team, participated in an occupational and environmental health exchange with Romania. This educational exchange entailed working with groups of nurses, physicians and scientists in Cluj and Bucharest Romania. Romanian occupational health professionals were part of a number of delegations to the United States in which educational programs were executed. Kay Arendasky developed and led instructional exchanges along with other USAID grant participants, occupational health professionals and former students. Kay Arendasky hosted Romanian occupational health

professionals at the International Congress on Occupational Health (ICOH) as well as international partnership conferences.

- International outreach included an instructional exchange with the Manager of the environmental research department of Volvo in Sweden. As a member of the Board of Governors for the Institute for environmental Studies (IES) at Penn, Kay Arendasky extended an invitation to speak at IES and arranged a program in Washington D.C. which included sessions at NIOSH, OSHA and EPA.
- There are beginning plans for a student exchange in Sweden, United Kingdom and France.

Interdisciplinary and Outreach Efforts

- The continued relationship between the University of Pennsylvania and Temple University is a model for interdisciplinary collaboration among programs not part of an ERC. We continue to share courses with Temple environmental health students. This interdisciplinary collaboration includes Environmental Toxicology, Industrial Hygiene, Industrial Safety, plant walk-throughs and projects. In addition a dual degree is being developed with Temple Industrial Hygiene program. This new program will make it possible for occupational health nursing students to earn a MSN and MS in industrial Hygiene by taking an additional eighteen semester hours (credits). To date, one student has expressed interest in the opportunity. Given the close relationship between the disciplines and this option's industrial marketability, it is believed this will not only be an attractive option but improve the quality of Occupational health provided to small and mid sized companies.
- An extension of this collaborative model is being made with Thomas Jefferson University(TJU) with the establishment of a Clinical Center in Occupational Health. Kay Arendasky, a core member of this multidisciplinary team comprised of professional from health care, business, government and labor, was instrumental in bringing occupational health professional to the group. This beginning relationship has resulted in several collaborations, the USAID partnership with Romania being one.

- Program faculty have devoted much time and resources to establishing interdisciplinary interactions which can benefit students, industry and labor in the region. The internship developed with OSHA as previously discussed is one example. A collaborative relationship has been developed between PHILAPOSH, a Philadelphia based labor group addressing occupational health and safety. This relationship has spawned collaboration on health and safety issues in the Philadelphia area. Occupational health students continue to do guest lectures in the Industrial Hygiene course. Other students have made presentations to multiple employee groups at the request of local employers. We believe this outreach and visibility provides excellent educational opportunities for students and serves to promote and strengthen occupational health's position in the community.

Research Program

- It is the philosophy of the School of Nursing to include research information and projects at all levels of education and in appropriate course work. Students in the Occupational Health Program have ample opportunity to address research issues and multiple course offerings and as research assistants. Students develop a formal research proposal within the Epidemiology course which can be a basis for a future project. Beginning research is embodied in the occupational health core courses, both theory and clinical. Students explore an issue, define a question and support an approach. This is done through papers, presentations and video with a critique, along with clinical projects. Administration/Consultation Option students have access to the Leonard Davis Institute for health care research through their course work.
- Recently, a line of occupational health research has been pursued within the School of Nursing. The School of Nursing's Center for Health Care Policy and Research received a grant to study "Hospital Nurses' risk of occupational exposure to blood: prospective, retrospective and institutional reports."

Smithsonian Institution Exhibit

- Karen Buhler-Wilkerson had a formal exhibit at the Smithsonian Institution in Washington D.C. which depicted

the history of American public health nursing. Occupational health Nursing's origins were in public health nursing and financially supported by industrialists as indicated in the Smithsonian exhibit. Home care of sick and injured workers was part of the public health nurses responsibility. This photographic and written portrayal of nurse's care during the late eighteen hundred and early nineteen hundreds created much discussion and commentary at the Smithsonian. So much so, that the Smithsonian requested to continue this exhibit for over a year.

Curricular Improvements

- The Occupational Health Program's Primary Care Option is taught in conjunction with the School's Primary Care Program. The Primary Care Program at the University of Pennsylvania is well known and respected both nationally and internationally. The Program celebrated its twentieth anniversary in May of 1995. The Primary Care Program at Penn is the largest in the nation and draws on the expertise of renowned clinicians such a Barbara Bates MD who is on faculty and teaches in the physical assessment course. Students within the option share course work with geriatric, pediatric, adult, family and tertiary care nurse practitioner students. Each brings a special contribution to shared courses resulting in a broad information base.
- Traditionally, Primary Care Option students have been prepared as adult nurse practitioners. This educational path has been broadened to include preparation as a family nurse practitioner. Three students within this grant period have opted to take the additional course work required to fulfill this qualification. Occupational health nurse practitioners with family preparation are well suited to provide primary care in industry whose policies cover employees and families, migrant health and practices which provide a full range of services. Professional marketability is also an outcome gained.
- Distance learning has been offered at the School of Nursing in the Midwifery program with success. The Family Nurse Practitioner program has also developed a plan for distance learning. The occupational health program is working to link the Program with this technology. It is the plan of the School of Nursing to progress with

distance learning in an efficient manner, adding programs as they can be supported by the system and the School. Currently, funding is being sought for this program. It is strongly believed a distance learning program will provide valuable and necessary education to those individuals unable to pursue masters level education in occupational health because of distance, personal concerns or job responsibilities, with a desirable means to do so. With this educational avenue, occupational health education can be offered to more rural areas and areas of industry not serviced currently.

- The Occupational Health Program participates in several evaluation processes. First, the School of Nursing participates in a University wide evaluation program, analyzed and reported by the Wharton School of Business. Students are asked to evaluate each course with a numbered system and add commentary as desired. Occupational health courses have traditionally scored in the highest categories. Second, the School of Nursing participates in a broad evaluation process including all graduates of its baccalaureate, masters and doctoral program. This evaluation focuses on quality of education, preparation for employment, and positions hired. Once again, students have found their preparation to be outstanding, ranking the program in the top three of twenty four. Third, occupational health students are asked in many of their classes to evaluate each individual class for content, relevance and presentation. This information is used to add or modify content. Fourth, students in the occupational health program have opportunity to evaluate presentations of student colleagues. By beginning the process of collegial evaluation in the academic environment, students learn proper and constructive peer review while faculty receive additional information concerning student needs. The impact and quality of the program is also addressed through its clinical preceptor program. Preceptors are asked to comment on student performance and preparation for practice. Numerous preceptors have made comments such as the following. "How do you continually get such high quality students?" "Penn students are always the best." We are pleased and proud of our record and are grateful for NIOSH support which has aided us in our mission.
- The relationship between OSHA in Washington D.C. and the University of Pennsylvania has been long standing. Each year during this grant period, students participate in a two day trip to Washington D.C. visiting agencies prominent in occupational and environmental health. At

OSHA students have met with the Deputy Director, Directors of the Office of Nursing, Medicine, Ergonomics and Congressional liaison. Our NIOSH visit included hearings regarding the National Occupational Research Agenda in addition to our discussion with a senior scientist. Visits to the Washington Business Group on Health, the President's Committee on the Employment of Disabled Persons, the American Nurses Association and Organization Resource Counselors are also included in this trip. Students, without exception, feel this is one of the most important experiences in the program. We appreciate NIOSH's continued support of this valuable experience.

- We continue to develop clinical sites appropriate for students in both occupational health options. Annually, we conduct a preceptor workshop with the Primary care Program and in conjunction with the Board of Overseers Scholar Lecture. This aids preceptors in understanding their responsibilities as well as program and student responsibilities. The continued participation of preceptors in this program attests to its success. Even though we have an abundance of occupational health clinical preceptors, we have continued to generate new sites when an experience has excellent value. During each semester's clinical placement, we visit each student a minimum of two times. During the visit, preceptors are asked for input and identification of strengths and/or weaknesses seen in the students and in the program. Although these visits are costly in terms of faculty time, they are proportionately important to the ongoing viability of multiple clinical placements and the healthy relationships we have with the industrial community.
- Occupational health students change clinical sites with each clinical course. While changing placements for each clinical course places a large burden on occupational health faculty, it is believed to provide a higher quality experience for the student. Different clinical placements provide the student with varied philosophy's of care, occupational policies and exposures, and organizational formats. The University of Pennsylvania School of Nursing values its clinical placements and preceptors. Those sites affiliated with the Occupational Health Program during this reporting period have been supported and acknowledged for their contribution to the Program. Projects produced during the Advanced Practicum in Occupational Health, have been appreciated by preceptors for their quality and usefulness. In all cases, these projects have been incorporated into the

operation of the site.

- Ongoing development and refinement of both the Primary care option and Administration/Consultation opportunity has transpired during this grant period. Occupational Health Program faculty have taken an active role in both these options to assure quality and to be a viable, contributing emissary for Occupational Health needs and issues. Program faculty have incorporated occupational health content and experiences within all primary care and nursing administration courses. This investment on the part of the Occupational Health Program, has yielded a positive return. Occupational health interests and needs have been brought to the forefront and there is a growing appreciation for the effect and diversity of occupational and environmental factors in people's lives.
- Epidemiology remains a required course in the Occupational Health Program. The course's popularity has grown and draws students from varying programs within the School of Nursing and the University. Jennifer Pinto-Martin, an epidemiologist, has been appointed to the faculty and will teach this course on a permanent basis. The course content is rich in occupational health information and examples. Students produce beginning projects which are quite detailed and can be used in future research endeavors.
- A new elective has been offered in the School of Nursing called the Business of Nursing. As part of this course, students will gain administrative theory and formally prepare a business plan. All students in occupational health are advised to take this course. Students from numerous programs in addition to Occupational Health and Nursing Administration, elect to take this course. Evaluations of this course have demonstrated the students satisfaction with the course and the need for its content.
- During this grant period, two continuing education programs were conducted concerning occupational health. The first, *Workplace Violence: Recognition and Response*, was held in April, 1994. It was sponsored by both the University of Pennsylvania School of Nursing and Sellin Center for Studies in Criminology and Criminal Law. The response to this program was excellent. The second program was *Addiction in the Workplace: Developing Proactive Intervention Strategies*. The continuing education offerings must be self supporting. Funding

sources are always sought.

Faculty Strength

- The contributions of both the School of Nursing and NIOSH during this period have resulted in the strong Occupational Health Nursing Program offered. The Program faculty include individuals with excellent preparation and experience in Occupational Health. Because of the unique design of the program, NIOSH funds only a small percent of the cost for the program and students. The Occupational Health Program's course work which is integrated in the Nursing Administration and Primary Care programs, is supported by the School and resources other than NIOSH. This encompasses greater than 75% of the total program. NIOSH funded only a portion of the remaining Occupational Health Program and faculty costs.
- Karen Buhler-Wilkerson, RN, PhD, FAAN is the Program Director of the Occupational Health Program. She has been associated with the Occupational Health Program since its inception. She is a nationally recognized scholar and brings many years of experience and expertise in public health to this position. During this grant period, Dr. Buhler-Wilkerson chaired the Family and Community Health Division in which the Occupational Health Program is housed. As a full time professor and division chair, she has been able to fully comprehend the needs of the program and assist with the direction and progress of the program's objectives within the scope and long range plans of the School of Nursing. Dr. Buhler-Wilkerson has been minimally compensated by the grant at 10%.
- Kay M. Arendasky, MSN, CRNP, continues as the Associate Director for the Occupational Health Program on a full time basis. Her extensive occupational health experience includes directing and implementing the first full service on-site contractual occupational health facilities in the region, as well as directing and managing large off-site occupational health centers. She has been a speaker for occupational health nursing organizations as well as other nursing organization. She is frequently contacted by corporate settings to assist in developing and implementing occupational health services. She has been asked by several regional organizations to provide information and assistance for nurse managed centers. She has been an occupational

health and safety consultant and has developed and marketed occupational health and safety services.

- Cynthia C. Scalzi, RN, PhD FAAN, is the Director of the Nursing Administration Program and is the Coordinator of the Occupational Health Administration/Consultation Option. Dr. Scalzi is responsible for those nursing administration courses attended by occupational health students in the Administration/Consultation Option. Dr. Scalzi has joint appointments with the School of Nursing and the Wharton School of Business and is a Senior Fellow at the Leonard Davis Institute for Health Economics. Dr. Scalzi has explored the need for advanced management training of nurses in occupational health settings and approaches to the integration of needed content and experience within graduate level nursing administration programs. Dr. Scalzi has worked closely with the Occupational Program faculty to incorporate the course enhancements necessary to meet the needs of the occupational health graduate student. Additionally, she is the faculty interface with the Wharton Business School.
- Eileen Sullivan-Marx PhD. CRNP, FAAN is the Director of the Adult Nurse Practitioner Program and coordinates the Occupational Health Nurse Practitioner Option within the Primary Care Program. Dr. Sullivan-Marx has extensive clinical experience as a nurse practitioner in private practice and nurse managed centers. She is recognized as an expert in health care reimbursement issues and serves as a member of the payment review task force with the American Medical Association. She is a consultant and advisor for the American Nurses Association on reimbursement issues as well as regional health care and policy organizations. She is a major supporter of nurse managed models and has been instrumental in the advancement of nurse practitioner regulatory reform. Dr. Sullivan-Marx oversees course work offered to all masters students in Adult Primary Care and interfaces with Occupational Health Program faculty regularly.
- Jennifer Pinto-Martin, PhD. recently joined the faculty as indicated earlier. She teaches Epidemiology within the School of Nursing. She is a welcome addition to the faculty as an expert teacher and researcher.
- Robert Patterson, Sc., CIH is Director of Environmental Studies at Temple University. Dr. Patterson coordinates the three Temple courses taken by Penn nursing students.

Through collaboration with occupational health faculty, changes have been incorporated into the curriculum shared by industrial hygiene students and occupational health nursing student.

Recruitment

- The Occupational Health Nursing Program has been a part of the mainstream of student recruitment activities in the School of Nursing. Under the direction of the Assistant Dean for Admissions, Graduate Education Day is held during the fall and spring term. Letters and posters are sent to institutions and individuals to advertise the program. Attendance at these recruitment programs ranged between 200-300 at each meeting. From the meeting, prospective applicant lists are developed and there is follow-up by Program faculty over the course of the year. The personal contact with nurses during these Graduate Education Days yielded 40% to 45% of the enrollment in the Occupational Health Program. Additional recruitment methods included responding by letter and with scheduled appointments to inquiries by interested candidates, circulation of program brochures and material at regional and national conferences, program promotion following presentations at regional continuing education conferences, advertisement in the American Journal of Occupational Health Nursing, materials distributed at career days held regionally by the Admissions and Recruitment office, and through the network of contacts the program has developed since 1985. Inquiries regarding the program come primarily from the eastern seaboard but do include candidates from a variety of areas within the United States and internationally. A major inhibitor to actual enrollment is the limited tuition package available to students at Penn as compared to the other nursing programs housed in Educational Resource Centers.

Occupational Health Program Graduates

7/1/94 - 6/30/97

<u>Name</u>	<u>Graduation Year</u>	<u>Degree</u>	<u>Option</u>
Sara Abbott	1995	2nd clinical major	PC
Christine Collins	1994	MSN	AC
Jacqueline Crespo	1996	MSN	AC
Julianne DeClene	1994	MSN	PC
Judith Farrington	1995	MSN	PC
Marguerite Gildea	1996	MSN	PC
Mary Hannigan-Conroy	1996	MSN	PC
Patrick Loynd	1996	MSN	PC
Naomi Lubkin	1995	MSN	PC
Debra Ann Oliver	1994	MSN	PC
Lynn Vance O'Malley	1994	MSN	PC
Meenati Patel	1996	MSN	PC
Lois Pearson	1996	MSN	PC
Donna Stein-Keller	1995	MSN	PC
Sharon Sterner-Burt	1994	MSN	PC
Dawn Marie Smith	1994	MSN	PC
Ann Marie Szoke-Halal	1994	2nd clinical major	PC
Patricia Ellen Talley	1994	MSN	PC

