In 1991, the Northwest Area Health Education Center in North Carolina conducted a needs assessment of area hospitals, revealing that Respiratory Care (RC) departments in Catawba and Alexander counties would require 29 technicians and therapists within 3 years. A survey of area high school students identified 44 students interested in RC. In addition, a survey of currently employed RC personnel in the area revealed another 24 potential students in need of skills upgrading. Finally, a third survey indicated that nearly 75% of credentialed personnel working in RC were trained on-the-job or had graduated from a correspondence program. In an effort to address this need for a formal RC training program in the area, Catawba Valley Community College in Hickory, North Carolina, established an advisory committee to seek funding for initiation of a training program at the college. Two local hospitals pledged financial support, several regional RC departments offered to donate equipment, and many local hospitals volunteered to be clinical sites for student training. A curriculum, planned in accordance with accreditation and health care standards, was submitted to the North Carolina Department of Community Colleges (NCDCC). In July 1991, NCDCC approved the program, which enrolled its first students a month later. In August 1992, 11 students graduated from the program and are now working in area hospitals. From beginning to end, the establishment of the program took over two years, but today the northwest region of North Carolina has a Respiratory Care Technology Program. Steps for establishing similar Allied Health programs include demonstrating need, getting local health care institutions involved, and obtaining institutional support. (PAA)
A Model Solution to the Allied Health Personnel Shortage

Initiation of a Respiratory Care Technology Program at Catawba Valley Community College, Hickory, North Carolina:

A Case Study

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Community colleges in the 1990's are facing ever increasing burdens: more students, greater demand from community businesses for skilled personnel, cuts in state support and the resultant challenge of how to meet the demands. This task is not easy when Allied Health Programs are considered. Major metropolitan areas have schools which provide graduates for their large medical centers yet these programs usually do not have a surplus of graduates to supply outlying regions.

In Hickory, North Carolina at Catawba Valley Community College (CVCC) there was an interesting success story which took place in 1991. One might look at this history beginning in 1987 with the Northwest Area Health Education Center (NW AHEC) of Bowman Gray School of Medicine Regional Respiratory Care Managers Group. In the summer of 1987 there was a growing concern that area personnel both on-the-job trained and those interested in Respiratory Care could not attend a formal educational program. The first consortium effort between Forsyth Technical Community College, CVCC and other community
colleges in the area had failed leaving these people two alternatives: first, driving 52-70 miles to the nearest established program or, second, seeking their education through a correspondence program, the California College of Health Sciences. These difficult choices concerned many managers. Either people would have distance driving while still working to support families or attempt a curriculum by correspondence. The question arose of how could these managers obtain an educated staff and keep their departments staffed at the same time. In the past, managers trained personnel on-the-job but with increasing technology and more demands on managers time this prospect seemed more difficult. Some hospitals can afford to hire people from other areas of the country or the state until these people are lured away to other metropolitan areas. A number of managers worked to assess the interest and need for a local program in Respiratory Care. This was the beginning of an effort to obtain a formal educational program in the region.

A needs assessment survey completed by NW AHEC in 1991, cited the overwhelming needs of area hospitals within the next five years. Respiratory Care departments in Catawba and Alexander counties projected that in three
years 29 technicians and therapists would be needed. At five years an additional 17 positions would be created. An expansion of this survey to 13 nearby counties showed the need for technicians and therapists was 42 over a period of three years and 32 at five years. The need for qualified personnel had never been greater in this age of technology. It was evident in this survey that some solution must be found for this personnel shortage.

A student interest survey was done to correspond with the personnel survey. A survey of high school students in grades 10, 11, and 12 revealed 44 students interested in Respiratory Care. Another survey utilized those currently employed in respiratory care as on-the-job trainees or those who have only a one-year degree (Certified Respiratory Therapy Technician). The results yielded yet another 24 potential students.

Another aspect which was surveyed in the northwest region of North Carolina was that of credentialed and non-credentialed personnel currently working in Respiratory Care. The expanded county survey showed nearly 75 percent of the employees were on-the-job trained or had been students in the correspondence program for Respiratory Care. These three areas, future
positions, potential students and need for a formal educational program, demonstrated the need for a Respiratory Care program in this area.

With the need established, the next phase of planning was development of a budget. For this purpose CVCC established an advisory committee. This committee was composed of persons from local hospitals, CVCC, NW AHEC, the North Carolina Section of the American Lung Association, and two consultants. One consultant assisted in the establishment of need while the second consultant assisted in the formation of a curriculum and budget. A proposed budget was presented to the committee with various funding sources discussed. Two local hospitals pledged their financial support. One advisory committee member pledged money for a scholarship while several regional Respiratory Care departments pledged to donate equipment. Catawba Valley Community College promised to find space for the program. Many local hospitals volunteered to be clinical sites for the student training. With funding strategies discussed, committee members returned to their health care institutions to establish financial commitments. One local hospital had to take the proposal before the county commission for
approval of funds. This was successful. The program appeared to be taking shape. Coinciding with commitment of financial support, academic preparation was implemented.

The official application to the North Carolina Department of Community Colleges (DCC) was filled out with the curriculum planned in accordance with guidelines from the Southern Association of Colleges and Schools and the Joint Review Committee on Respiratory Therapy Education. Once these two steps were completed the application was submitted for approval to DCC to begin the program in the fall of 1991.

During this era of cutbacks and reduced funding by government agencies, it was planned that the program would be essentially self-sufficient for two years. Those involved in the process could only hope that the DCC would view it similarly. Approval came in early July for the program to begin in late August. The establishment of this program from beginning to end took over two years but today the northwest region of North Carolina has a Respiratory Care Technology Program. In August of 1992, eleven students met requirements for graduation and are now working in the surrounding hospitals which helped get
the program off the ground. This accomplishment was an amazing feat.

This example may provide a model for other emerging programs in Allied Health in other regions or states—i.e., establish the need, get local health care institutions involved, and obtain institutional support both in actions and words. When asking for financial support a contractual agreement is recommended to formalize relationships.

This process will not be easy yet it is possible even in these days of funding reductions. One should look to the examples of business and industry programs in attempting to meet the personnel shortages in Allied Health. Allied Health educators need to take apparently insurmountable situations and use them pro-actively to benefit the supply of personnel needed in the health care industry.

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