A study investigating the health care support service training needs for Gloucester County and workforce development demand

Maureen D'Andrea
Rowan University

Follow this and additional works at: http://rdw.rowan.edu/etd
Part of the Higher Education Administration Commons

Recommended Citation
D'Andrea, Maureen, "A study investigating the health care support service training needs for Gloucester County and workforce development demand" (2005). Theses and Dissertations. 985.
http://rdw.rowan.edu/etd/985

This Thesis is brought to you for free and open access by Rowan Digital Works. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Rowan Digital Works. For more information, please contact LibraryTheses@rowan.edu.
A STUDY INVESTIGATING THE HEALTH CARE SUPPORT SERVICE
TRAINING NEEDS FOR GLOUCESTER COUNTY AND
WORKFORCE DEVELOPMENT DEMAND

by

Maureen D’Andrea

A Thesis
Submitted in partial fulfillment of the requirements of the Master of Arts in
Higher Education Administration
of
The Graduate School
at
Rowan University
March 2005

Approved by ____________________________
Dr. Burton R. Sisco

Date Approved 3/10/05

© 2005 Maureen D’Andrea
ABSTRACT

Maureen D’Andrea  
A STUDY INVESTIGATING THE HEALTH CARE SUPPORT SERVICE TRAINING NEEDS FOR GLOUCESTER COUNTY AND WORKFORCE DEVELOPMENT DEMAND  
2003/04  
Dr. Burton R. Sisco  
Master of Arts in Higher Education Administration  

The Division of Lifelong Learning at Gloucester County College conducted a survey of medical offices in the county to determine what occupations they employed and what their projected employment need for those occupations was in the next three years. The purpose of the study was to determine if GCC should develop training programs for those occupations. GCC also wanted to provide training for occupations that would qualify for workforce development funding. Over 500 surveys were mailed to medical offices in the county and responses were received from 72 offices. The research data indicated there was a need for training by the healthcare providers for the occupations medical coding and billing and for medical administrators. The occupations of medical coding and billing and medical administrator were listed as “in demand” on the NJ Employment Information Website in 2003 which meant that persons pursuing training in those occupations could qualify for workforce development funding.
ACKNOWLEDGMENTS

I would like to acknowledge the support and encouragement of Dr. Burton Sisco, my advisor for this study. His expertise in the field of adult learning made for interesting discussions and his friendship added to the overall experience. Secondly, I would like to acknowledge Molly Pennell, Director of Lifelong Learning at Gloucester County College and her staff who graciously spent their time teaching me the “ropes” of their department. It was a wonderful experience to work with such a dedicated group of people. I also need to thank my staff at GCC, Sue Cano and Genevieve Serra, who were very supportive of my goals. Many thanks to my friend and co-worker, Karen Lucas who was a great help in editing this document.

Adult learners need the support of many people and I had that support from my friends, family and colleagues. A special thanks to my Mother, Edith D’Andrea, a true lifelong learner, who is my role model and best friend. Thank you to my Dad, Edward D’Andrea, who as an educator and coach, always showed great respect for his students and his vocation along with always believing in me. Last but not least, I would like to thank my adult children, John and Kathleen March, for their encouragement, advice, enthusiasm and love. I continue to learn from them.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>INTRODUCTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONE</td>
<td>Statement of the Problem</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Significance of the Problem</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Purpose of the Study</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Assumptions and Limitations</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Definition of Terms</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Research Questions</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Organization of Remaining Chapters</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>REVIEW OF LITERATURE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWO</td>
<td>Adult Education</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>The Program Administrator</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Program Planning</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Workforce Investment Act</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Programs for Medical Assistants</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Workforce Development Demand</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Summary of Literature Review</td>
<td>24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>METHODOLOGY</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>THREE</td>
<td>Context of the Study</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Population</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Instrumentation</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Procedure of Gathering Data</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Data Analysis</td>
<td>28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>FINDINGS</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUR</td>
<td>Profile of the Survey Respondents</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Research Questions</td>
<td>30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIVE</td>
<td>Summary of the Study</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Discussion of the Findings</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Conclusions</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Recommendations</td>
<td>41</td>
</tr>
<tr>
<td>TABLE</td>
<td>Description</td>
<td>PAGE</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>4.1</td>
<td>Type of Training Desired for Current Staff and Projected New Staff Positions</td>
<td>31</td>
</tr>
<tr>
<td>4.2</td>
<td>“Demand” Occupations for Gloucester County 2003 and 2004 per NJ website</td>
<td>32</td>
</tr>
<tr>
<td>4.3</td>
<td>Additional Training Programs Desired</td>
<td>33</td>
</tr>
<tr>
<td>4.4</td>
<td>Certifications required by Employers</td>
<td>34</td>
</tr>
</tbody>
</table>
CHAPTER ONE

INTRODUCTION

This thesis will demonstrate the researcher's experience in developing a program for adult learners at a community college. As established in the program planning literature, it matches good practice, with the reality of working in the ever changing environment of adult education. The effect that the Workforce Investment Act has on local programs is also considered.

Statement of the Problem

The problem presented is a change Gloucester County is experiencing in the employment demand for certain occupations within the healthcare field and the need for training for these healthcare occupations.

Significance of the Problem

In 2003, the Gloucester County, New Jersey Freeholders, became aware the county was spending a significant amount of money to schools for county residents who qualified for reimbursement under the Workforce Development Act (WDA). The Workforce Development Act provides that an unemployed person may receive up to $4,000 in training expenses for occupations that are in demand within the county. Since the county also provides partial funding for Gloucester County College (GCC), the Freeholders posed a question to the Director of Lifelong Learning (LLL) at GCC, “Why aren’t workforce development students going to the county college for training?” When the director investigated into the programs that county residents were taking at other schools, she found that 80% were taking programs to become Medical Assistants or
Administrators, an occupation that qualified for Workforce Development since it was considered to be in high demand within the county. The Director of LLL approached the researcher for help in developing a program for Medical Administrators that would be offered for college credit. Since LLL does not offer programs for college credit, the academic dean of GCC was approached about creating a program. The academic dean recommended a needs analysis be conducted to establish the extent of demand in the county before he would consider developing a new program.

Purpose of the Study

The purpose of the study was to determine the training needs of selected health care providers in Gloucester County in order to determine what programs Gloucester County College could provide that would qualify for the Workforce Development Act. Of particular interest was the identified demand for health science support service occupations that might be serviced by Gloucester County College.

Assumptions and Limitations

It was assumed that GCC would keep all responses to the survey confidential. It was also assumed that health care providers would respond to a survey in sufficient numbers to make the results valid. If a survey showed a need for particular programs, it was assumed that GCC would consider the findings and take steps to develop a program. The survey was limited to medical practices in Gloucester County and towns bordering Camden County. The survey was conducted in Spring 2004 and completed over a two-month period. Other limitations of the study included non-random sampling techniques that could compromise generalization of the findings and potential researcher bias.
Definition of Terms

Educational Need: Defined as occupational training that is desired or wanted by employers for their employees or by prospective employees to qualify them for specific occupations.

Employment Need: Defined as number of employees that employers require with specific occupational training.

Healthcare Provider: Defined, for purposes of this study, as an individual or group of medical doctors, osteopaths, chiropractors, dentists and podiatrists currently practicing in Gloucester and Camden counties in the state of New Jersey.

Medical Administrator: Someone who performs administrative duties commonly associated with the operation, administration and record-keeping of a medical office.

Medical Assistant: Someone who performs routine administrative and clinical tasks to keep the offices of physicians, podiatrists, chiropractors and optometrists running smoothly.

Medical Transcriptionist: Someone who listens to dictated recordings made by physicians and other healthcare professionals and transcribes them into medical reports, correspondence, and other administrative material.

Phlebotomist: Someone who collects blood samples.

X-ray Technician: Someone who takes x-rays and administers nonradioactive materials into patients' blood streams for diagnostic purposes.

Research Questions

The following research questions guided the study:
1. What are the educational training needs for health science support occupations of selected healthcare providers in Gloucester County?

2. Do the identified training needs match up with the health science support occupations that are listed as qualifying for workforce development funds in Gloucester County?

3. What programs should GCC develop that will meet the demand in the county and qualify for Workforce Development funding?

Organization of Remaining Chapters

Chapter two provides a review of the literature on the theory of adult education, the basic steps involved in developing adult education programs, the Workforce Investment Act, and programs for medical administrators. Chapter three discusses the methodology used in conducting the survey, the population and samples, the procedures for collecting data and how the data were analyzed. Chapter four discusses the findings of the study. Chapter five provides a summary of the study, discusses the findings in relationship to current literature, renders conclusions and offers recommendations for program development and future research.
CHAPTER TWO

REVIEW OF LITERATURE

This chapter discusses the literature that relates to the philosophy, planning and development of educational programs for adults. Specifically, the literature on education programs for medical assistants/administrators is discussed.

Adult Education

The field of adult education is very broad. It is carried on by a variety of agencies, for a variety of purposes and with many different kinds of people. In order to define its range, Apps (1991) identified a framework for understanding the scope of adult education. He classified adult education by the type of agency providing the training and specified the areas within those categories as illustrated below.

I. Fully or partially tax supported agencies and institutions
   A. Public school adult education
   B. Four-year colleges and universities
   C. Community and technical colleges
   D. Cooperative extension
   E. Armed Forces
   F. Correctional institutions
   G. Libraries and museums
   H. State and federal public adult education agencies

II. Non-Profit
   A. Religious institutions
B. Health institutions
   1. Courses on wellness
   2. Courses on physical fitness
C. Community-based agencies
   1. Red Cross
   2. YMCA
   3. YWCA
D. Service clubs
   1. Kiwanis
   2. Rotary
E. Voluntary Organizations
   1. League of Women Voters
   2. Sierra Club
F. Professional organizations—national, state, and local
G. Worker education programs
H. National adult education clearinghouse and conference providers

III. For Profit providers
A. Correspondence schools
B. Proprietary schools
   1. Truck driving schools
   2. Electronics schools
   3. Hairdresser schools
C. Private tutors and teachers
D. For profit degree granting colleges and universities
E. Consultant and workshop providers
F. On-line data-base services
G. Publishers of how-to books, videotapes, and audio tapes
H. Computer software publishers
I. Business and industry sponsored programs
   1. Arthur Little management degree program
   2. Instructional courses offered by craft stores
J. Business and industry human resource development programs for employees
K. Conference centers

IV. Nonorganized learning opportunities
   A. Television viewing and other mass media
   B. Work setting
   C. Family
   D. Travel
   E. Recreational and leisure time activities (Apps, pp. 280-81)

Who is considered to be an adult is a vast topic of discussion within the literature of adult education. Some definitions cite chronological age as significant while others look at rites of passage. Kowalski (1988) cites Karp and Yoels (1982) who describe adulthood as the way people see themselves socially, thus the person who is socially mature may be treated as an adult even though chronologically one may still be a teen. Another way of defining adulthood is to consider social roles, i.e. a person who quits high
school and goes to work and is financially independent may be considered an adult.

Kowalski (1988) also mentions work done by Karp and Yoels who developed a very complex description of adulthood. In their description, developmental tasks are divided into stages and adulthood is dependent upon achieving a certain level of development within a classification system (Kowalski, 1988). These tasks are the products of cultural expectations, physical development, individual values, goals and social readiness.

It is important to recognize the differences between adult learners and younger learners so that programs can be planned that meet the needs of adult learners. When administrators of adult learning programs recognize the characteristics of adult learners they can make better decisions and program more effectively (Kowalski, 1988).

The theory of adult education is based on defining the differences between the learning attributes of an adult learner and those of a child learner. The study of adults as a separate educational group is called andragogy. The word and the model of andragogy were popularized by Malcolm Knowles (1982) in the late 1960s and throughout the 1970s and 1980s. He noticed the special learning differences between adults and children while serving as a program administrator of YMCA programs in Chicago, Illinois. As a result of his observations, Knowles formulated several primary assumptions about adults as students:

1. Their self concept comes from one of being a dependent personality toward a self-directed human being.

2. They accumulate a growing reservoir of experience that becomes an increasingly rich source of learning.
3. Their readiness to learn becomes oriented increasingly to the developmental tasks of their social roles.

4. Their time perspective changes from one of postponed application of knowledge to immediacy of application and accordingly their orientation toward learning shifts from one of subject centeredness to one of performance centeredness.

(Knowles, pp. 44-45)

Andragogy suggests a teacher role that is more responsive to learner needs and less teacher directed. The model encourages high levels of self-directed learning with the adult students having input regarding content, methodology, learning assessment techniques, as well as program design (Kowalski, 1988).

Kowalski conducted his own study of the differences between adult learners and children and found the following to be where differences existed:

- Motivation (adults are more motivated).
- Physical speed (adults lose speed as they age).
- Personality (adults exhibit more fixed behaviors).
- Vision and hearing (these factors are regressive).
- Independence (adults are more independent).
- Expectations (adults demand a high level of relevance).

The following areas in which differences were not found include:

- Intellectual capacity
- Performance on intelligence tests (provided appropriate tests are used)
- Individual adaptations to instructional modes (adults, like children, exhibit different success rates with varying instructional modes.) (Kowalski, pp. 36-37)
Kowalski (1988) differs with Knowles who asserts that self-directed learning is the only way to teach adults. Kowalski says that teachers of adults should be capable of choosing appropriate methodology to suit the needs of the student and the situation. He feels that program development is a process that is based on the uniqueness of the situation. Therefore, a program for adult automotive students at a community college might be conducted differently than a program conducted at IBM for computer engineers.

Simerly (1989) argues that it is important for learning facilitators, consultants, counselors, program designers, and administrators to know as much as possible about the developmental process of adults. The more adult learning professionals understand adult learners, the greater the likelihood they will be able to develop relevant programs for the broad range of learners. It is also important for educators to be open to the various ways students learn. Adult learning involves a variety of interrelated factors. Simerly contends that each person's physical and neurological condition, cognitive and intellectual structures, psychological disposition and characteristics, and social roles and attributes all interact and influence his or her capacity for and involvement with learning.

Additionally, aging and capacity to learn are issues in adult learning theory. It has been found that although advancing age brings decline in sensory and motor functions, adult learning continues, barring disease and disuse (Merriam & Caffarella, 1999; Simerly, 1989). An adult's ability to learn is influenced by the environment, personal relationships, and level of involvement with life. An understanding of the manner by which adults change over time and the nature of adults as learners provides a basis for better preparation for adult learning (Merriam & Caffarella, 1999; Simerly, 1989).
The Program Administrator

Administrators of adult education programs need to be many things to many people: they need the qualities exhibited by good leaders, facilitators, counselors, teachers, strategists, negotiators, and coordinators (Galbraith, Sisco, & Guglielmino, 1997). They also need to be very ethical in the performance of their jobs as emphasized by Sisco (1988). For example, there is an ethical obligation to honestly abide by the rules of funding agencies and an ethical obligation to provide the student with training that is current in the field.

Program Planning

There are many steps program developers are advised to follow to successfully produce programs for adult education. Some of the elements of program planning that are critical include using an advisory council, assessing needs, formulating objectives, identifying resources, instructional planning, managerial considerations, and program evaluation (Kowalski, 1988). For a successful outcome, the planning must take into consideration how these elements fit within the setting of the environment and the organization.

Needs Assessment

Caffarella (2002) says an educational need is most often defined as a discrepancy or gap between what presently is and what should be. There are basic steps that she recommends when conducting an educational needs assessment which include:

Decide to conduct an educational needs assessment
Identify staff and develop a management plan
Determine context, purpose and objective
Determine target dates, timelines, budget, and staff

Choose respondents

Select techniques of data collection

Collect data in an appropriate and timely manner

Analyze data

Sort and prioritize needs

Communicate results (Caffarella, p. 127)

It is very important for those involved in the process of conducting an educational needs assessment to insure that the ideas from the needs assessment are actually used in the program planning process (Caffarella, 2002). A demand analysis should also be conducted to review employment trends and determine projections for future jobs.

Caffarella (2002) acknowledges that developing programs on identified needs of learners, organizations or communities does not guarantee that programs will be successful. For example, because a survey shows that there is a need for training on how to use the Internet, it does not suggest that the program will be successful based on needs alone. She thinks a successful program idea could just “feel right” based on a hunch, a chance conversation with friends or colleagues, or recent experiences. Thus, educators should exercise caution when developing programs solely on the basis of educational needs assessments.

Establish Program Objectives

Program objectives should be written so that all parties involved can understand the desired learning outcomes of the activity. The program objectives should be used as an internal checkpoint for consistency and “do-ability.” (Caffarella, 2002)
Instructional Plans

Preparing instructional plans involves designing the interaction between learners and instructors and resource materials for each education and training activity (Caffarella, 2002). The instructors of the program are often involved in developing these instructional plans. The staff responsible for designing instruction may be paid or volunteer, and internal or external to an organization (Caffarella, 2002).

Learning objectives describe what participants will learn as a result of attending an education or training session (Caffarella, 2002). Learning objectives are set in the context of the program objectives that focus on participant learning, so there is continuity between the two sets of objectives. The major difference between learning and program objectives is that learning objectives center on individual participants and sessions within a larger program while program objectives focus on the education or training program as a whole. When setting learning objectives, Caffarella (2002) says the developer must have a clear picture of the proposed learning outcomes.

Learning objectives are useful for four major reasons. First, they provide a focus and consistency for the design of instruction. Second, they are guidelines for choosing course content and instructional methods. Third, they are also a basis for evaluating what participants have learned. Fourth, they are directions for learners to help them organize their own learning (Caffarella, 2002).

Content

The starting point for selecting content is the learning objectives. Select what participants must know, should know, and could know and plan accordingly. In other
words, prioritize what is the most important to the least important in order to attain each learning objective (Caffarella, 2002).

**Instructional Techniques**

When deciding on instructional techniques there are many things to consider such as the focus of the learning objectives, the instructor’s ability to use the selected technique(s), the experiences and backgrounds of the learners, and the learning context (Caffarella, 2002). For example, if a learning objective is to acquire Internet searching skills it would be important to have a computer with Internet capabilities for the student to practice rather than just lecturing about how to work with a computer on-line.

**Instructors**

In order for an instructor to be able to use a particular instructional technique, the instructor must have the knowledge, skill, and confidence to handle a particular technique. The instructor should try to use techniques that actively involve the learner. In addition, instructors need to acknowledge the differences among learners, such as the way they respond to learning situations and their learning styles (Caffarella, 2002; Hiemstra & Sisco, 1990).

**Instructional Resources**

Instructional materials should fit the experiences, interests, and abilities of the learners. The materials should explain and illustrate what is being taught (Caffarella, 2002). The resources should also be available and easily used in the environment where the learning activity is held. Caffarella warns that teachers should also avoid overusing materials. Examples of instructional resources are people, workbooks, charts, transparencies, maps, videotapes, mediated presentations, and the World Wide Web.
When purchasing materials, a good question to ask is “Will it advance learning? Is it needed?” (Caffarella, 2002, p.186).

**Assessment Component**

The two main reasons for conducting assessments are to determine whether the student actually acquired the new skill or knowledge as stated in the learning objectives and to improve the instructional process (Caffarella, 2002). Sample assessment techniques include tests, essays, case studies, interviews, performance reviews, role playing, and reflective journals. The instructor should choose the technique that is appropriate for the target audience and learning outcomes. For example, a student would not write a reflection on searching the World Wide Web but rather demonstrate the skill of doing an on-line search if that was the learning objective.

**Transfer of Learning Plans**

How learners transfer what they have learned into their personal lives or at work has been a neglected part of the program planning process (Caffarella, 2002). It has been assumed in the past that the application of what was learned at a training program would somehow just happen when the learner left the class. Instructors did not feel responsible for making sure that the learner knew how to apply the new knowledge. No longer is this the case since it is important for program planners to consider planning for the transfer of learning as an integral part of the program planning process. Employers are asking for evidence of learning transfer and expect some attention to be paid by the program planner to this expectation (Caffarella, 2002).
Making Recommendations and Communicating Results

Program planners often overlook communicating program results, recommendations, and the value of education and training programs (Caffarella, 2002). Educators must tell their stories so that the various public groups will hear the message and receive a clear picture of what the value of education and training programs for adults is all about. Adult education is about learning and change. Program planners need to look at program successes and failures, and formulate recommendations to revise or eliminate current programs or to add new programs (Caffarella, 2002).

Selecting Formats, Schedules, and Staff Needs

When selecting formats, the program planner should choose the most appropriate format or combination of formats for the learning activity. These formats could be individual, small group, large group, distance learning or community learning formats. Planners need to take into account the desire to build a community of learners as part of the goals and objectives of the program. The program schedule should fit the formats chosen, the specific activities planned, and the participants' personal and job commitments (Caffarella, 2002).

The program planner should also identify staffing needs such as program designers and managers, program coordinators, instructors and facilitators and program evaluators. The program planner also needs to determine whether internal staff will plan and conduct the program or whether external consultants are required (Caffarella, 2002).

The choice of instructors should be based on the ability to ensure content expertise, competence in teaching adults, and the ability to respond well to the background and experiences of the learners (Caffarella, 2002).
Prepare Budgets and Marketing Plans

The budgeting steps include:

1. Estimating the expenses for the program including costs for the development, delivery and evaluation of the program.

2. Determining how the program is to be financed i.e. by participant fees, organizational subsidy, governmental funding and estimating the program income.

3. Manage the program budget and keep accurate budget records. Pay the bills for the program (Caffarella, 2002).

When marketing education programs, the planner must build and maintain program credibility, success, and market niches. It is also important to take a customer-oriented stance and be sure this is communicated through the marketing plan. As a starting place for developing the marketing plan, conduct a target audience analysis to help determine the background and experiences of the potential audience (Caffarella, 2002).

Working with marketing specialists, select and prepare promotional materials for the program (such as brochures, website materials, emails, newsletter copy, fliers) that tell the story of the product, the cost and the location of the program (Caffarella, 2002). According to Caffarella, it is important to practice good budgeting in developing the plan and to be sure the publicity tools are descriptive and accurate. If they are not, potential failure may result with the program.

Coordinating Facilities and On-Site Events

The handling of the details of the program facilities can affect the outcome of the entire program. Effective program managers understand the importance of staying on top
of the details. They arrange for suitable facilities that provide an environment for optimum learning, and arrange for reliable instructional materials and equipment (Caffarella, 2002). Program managers need to assure that all facilities meet the Americans with Disabilities Act (ADA) requirements. They need to monitor all of the on-site arrangements and to create a positive climate for learning from the moment participants arrive through the user-friendly registration process, participant orientations and introductions (Caffarella, 2002).

Program planners also need to provide systems for monitoring programs and making decisions when program changes are required. They need to insure that data is gathered for program evaluations and that recognition is given to program participants (for example certificates, mugs, celebrations) and thank you notes are sent to both staff members and participants who are part of the program (Caffarella, 2002).

At the conclusion of the program, loose ends should be tied up such as storing equipment, completing administrative forms, reconciling and paying bills, and conducting staff debriefings (Caffarella, 2002).

Workforce Investment Act

The Workforce Investment Act of 1998 provides the framework for a system that will prepare the workforce for jobs that are needed by employers. The system is designed to meet both the labor needs of employers and the educational needs of job seekers and those who want to further their careers.

The system is based on the "One-Stop" concept where information about a wide array of job training, education, and employment services is available for customers at a single location. At this one location job seekers can do the following:
1. Receive a preliminary assessment of their skill levels, aptitudes, abilities, and support service needs.

2. Obtain information on employment-related services, including information about local education and training service providers.

3. Receive help filing claims for unemployment insurance and evaluating eligibility for job training and education programs or student financial aid.

4. Obtain job search and placement assistance, and receive career counseling.

5. Have access to up-to-date labor market information which identifies job vacancies, skills necessary for in-demand jobs, and provides information about local, regional and national employment trends.

Through the "One-Stop," employers have a single point of contact to provide information about current and future skills needed by their workers and to list job openings. Employers have a single system for finding skilled workers who meet their employment requirements (US Dept. of Labor, 1998).

The Workforce Investment Act of 1998 provides financial aid for workers to retrain for occupations that are listed as being “in demand” in their area. What this means to those who provide occupational training is that there is a population of unemployed workers who are eligible to receive financial aid to take training in certain occupations. The training providers therefore have an incentive to provide training for those occupations considered “in demand” so that they can recruit these funded students.

The training providers work closely with the “One Stop’ to insure that the counselors and potential students are aware of their programs. Information about occupations and training providers is listed on a government web site that is easily
accessible to potential students. In New Jersey, each county has a “One Stop” center to handle the needs of the workers and the employers.

Programs for Medical Assistants

The purpose of education for health occupations is to adequately prepare qualified workers for entrance into health care occupations. The curricula should reflect the competencies and skills that are marketable and up-to-date (Richards, Evans & Twin, 1989). According to the 2004-2005 Occupational Outlook Handbook, Employment of medical assistants is expected to grow much faster than the average for all occupations through the year 2010 as the health services expands because of technological advances in medicine and a growing and aging population. It is one of the fastest growing occupations. Employment growth will be driven by the increase in the number of group practices, clinics and other healthcare facilities that need a high proportion of support personnel. The fastest growth is expected for workers in occupations concentrated outside the inpatient hospital sector, such as medical assistants and personal and home care aides. (p.341)

Job Skills Needed

In 1998, Pezzoli, Johnson, & Lum conducted a survey of local healthcare providers in Hawaii and found that 92% hired office workers. They also found that job titles in healthcare are diverse, but recent national certification efforts are focusing on the term “health unit coordinator.” Despite the title used, all healthcare offices need to have employees who are skillful in human relations and the legal aspects of records management, verbal communication and computer literacy. Accurate typing and filing
skills, as well as basic math and nurse aide care are also very important. The Hawaii study also found the best time for training was the evening, late afternoon or weekends (Pezzoli, Johnson, & Luum, 1998).

Factors Affecting Program Enrollment

A study conducted in Colorado (Smith, 2002) showed a great demand for healthcare occupations statewide but found that students were not enrolling in programs due to low salary and lack of information about the programs. The study indicated the majority of wages for graduates of community college health care programs were in the range of $8-15 per hour, with very few opportunities for higher wages (Smith, 2002). The study also noted that many health care providers do on-the-job training.

Curriculum

Programs for medical assistants combine subject matter and experiences designed to prepare a person to assist physicians by performing various functions related to both business and clinical duties of a medical office (Richards, et al., 1989). Business duties cover insurance, accounts, reports, medical records, computerized fiscal management, medical transcription and/or word processing. Clinical duties include preparation of the client for examination, assessing vital signs, assisting with physical examinations and treatments and routine laboratory procedures (Richards, et al., 1989).

The following topics are covered in the training materials for medical assistants: human relations and communications, medical terminology, medical law and ethics, basic medical assistant skills, surgical asepsis, instrument use, dressing application, basic laboratory tests, pharmacology, administering medications, emergencies, first aid, body planes and cavities, nutrition, individual body systems, secretarial procedures, business.
procedures and computer skills (Sloan, 1981).

It is important for the local faculty to evaluate which competencies are important to their communities. This evaluation should be done by the local education agency in cooperation with the occupational advisory committee to maintain local autonomy in school curricula (Richards, et al., 1989).

A sample curriculum for a Medical Assistant, Associate in Science program at Southwest Florida College is Anatomy and Physiology I & II, Disease Processes/Pathophysiology, Pharmacology, Medical Terminology, Medical Office Administrative Procedures, Medical Office Clinical Procedures I, II, III, Medical Law and Ethics, Patient Information Management, Introduction to Medical Insurance, Reimbursement Applications, Introduction to Computer Information Systems, Computer Applications, Writing Essentials, College Success, Career Development, English Composition, Fundamentals of Mathematics, Communication Dynamics and some elective courses. This program takes two years to complete based on a quarterly semester plan.

Challenges

Challenges facing health occupation programs at the community college level are multi-faceted and include student enrollment and retention; faculty recruitment and retention; cost of developing and maintaining health occupation programs; and lack of adequate clinical sites (Smith, 2002). There is increased marketing by commercial, for-profit schools and a lack of marketing by community colleges. There is also competition from vocational schools and on-the-job training offered by healthcare facilities (Smith, 2002).
In September of 2003, The State of New Jersey's Guide to Training and Education Programs website provided a list of institutions in New Jersey offering training programs for medical assistants along with the number of hours it took to complete the course and the cost. Camden County College has a program taking 250 hours and costs $4,249 which is offered by the continuing education division. Middlesex County College has a program taking 660 hours and costs $4,400 which is also offered by the continuing education division. Some colleges offer programs where the student may obtain an associate degree such as Bergen County Community College with a Medical Office Assistant AAS program and Cumberland County College with an Office Administration /Medical AAS program. Current research regarding the need for these programs in New Jersey was not available at the time this study was conducted.

In the Southern New Jersey area, Camden County College has experienced a high demand for their medical office administration and office technology programs and their students are obtaining employment upon graduation (Janowicz, 2004).

Workforce Development Demand

In 2003 the website for the State of New Jersey Employment Information indicated the following occupations were in demand for Gloucester County: Medical Office Management, Medical Records Administration, Medical Records Technician, Medical Transcription, Medical Secretary, and Medical Assistant. Using the U.S. Bureau of Labor Statistics (1999, 2000, 2001, 2002, 2003,), the employment history for the occupation of medical assistant, in the state of New Jersey, shows an average annual growth rate of 7.6% from 1999-2003. The number of medical assistants employed in 1999 was 281,480 and by 2003 it was 376,300. The average annual growth rate was
calculated by computing the growth rate for each year and then averaging the growth rate over 5 years. The occupation of medical transcriptionist shows a zero growth rate for those same years. The number of jobs for medical transcriptionists in 1999 was 97,260 and in 2003 it was 96,340.

Summary of Literature Review

The literature review covered three topics relating to this research study: planning and running adult education programs, the effect of the Workforce Investment Act on adult education programs, and the specific requirements for a training program for the occupation medical assistant.

The literature for administering adult education programs demonstrates the need for following good business and educational practices when setting up programs for adults. The steps were outlined in detail so that the program administrator has a guideline for program planning, establishing need for the program, setting program objectives, instructional content, and conducting assessment. The business of running programs is also handled with budgeting and marketing plans, site coordination topics and business ethics covered.

The characteristics of the adult learner were discussed with emphasis on the need for relevance in subject content so the adult learner will continue with the learning process. Self-directed learning was highly recommended for adults along with accommodating the learning styles of each student.

The Workforce Investment Act has been important to adult learners as it provides funding for persons who are unemployed and want to pursue education in a field that has
an employment demand in their region. It also provides an incentive for educational
providers to fill the need for training programs in these “demand” occupations.

The occupation of medical assistant was specifically researched in terms of
program development, curriculum, job skills and employment need because this
occupation was listed as qualifying for workforce development funds for residents of
Gloucester County, New Jersey.
CHAPTER THREE
METHODOLOGY

Context of the Study

The study was conducted at Gloucester County College (GCC), located in Sewell, New Jersey which is 10 miles south of the metropolitan area of Philadelphia, Pennsylvania. The county was primarily an agriculture community until the late 1960s when housing developments began replacing farms. The population has continued to grow at a very fast pace, with a growth rate of 10.7% from 1990-2000 and a 20.5% increase projected to 2020 (Wu, 2002).

GCC was founded in 1968 as Gloucester County was beginning to grow. Currently GCC has approximately 5200 students in credit programs and 20,000 students in non-credit programs. GCC offers over 50 associate degree majors.

This study was conducted for the Division of Lifelong Learning (LLL) at GCC. LLL provides continuing education programs for business and industry including certifications for computer specialties such as Microsoft Office. The division also provides customized training for businesses and is responsible for Adult Basic Education (ABE), General Education Development (GED), English as a Second Language (ESL), and the Retired and Senior Volunteer Program (RSVP).

Population

The population for the study consisted of healthcare providers in Gloucester County and the bordering towns in Camden County. A mailing list of the medical offices was purchased which totaled 647 labels. All were to be surveyed making for a total
population study. The mailing list was comprised of Medical Doctors (MD) and Doctors of Osteopathy (DO), although all types of medical offices were requested by GCC. Instead of one label per medical office the list had a label for each doctor in the practice which created multiple labels for each office. When the duplicate addresses were culled from the list, a total of 449 medical offices remained. Dentists, chiropractors and podiatrists were added to the population by looking them up in the Gloucester County telephone book. Seventy-five dentists, chiropractors and podiatrists (25 of each) were randomly selected from the yellow pages of the phone book and included in the survey bringing the total number to 524.

Instrumentation

The researcher developed a survey instrument based on the information required by the Division of Lifelong Learning. The survey asked the health care provider six questions revolving around the types of training required for office employees, projection for new jobs in the next three years, the type of business, suggestions for future training and the title of the respondent (Appendix C). The one-page survey was reproduced on white linen paper with blue ink for appeal and ease of presentation.

To ensure the instrument was valid, reliable, and free from bias the survey was reviewed by the Director of Lifelong Learning, the Executive Director of Institutional Research, and the Vice President for Institutional Advancement at GCC, and the researcher's professor at Rowan University. All made changes to the questions, the responses and the format based on their expertise. After several revisions, the final document and cover letter were approved by the Director of Lifelong Learning, the Executive Director of Institutional Research, and the Vice President for Institutional
Advancement at GCC, and the researcher's professor at Rowan University. The survey was also submitted to the Institutional Review Board at Rowan University in Glassboro, NJ in February, 2004 and approved in March 2004 (Appendix A).

Due to time constraints, a pilot study was not conducted but the clarity of the instrument was insured by the review of the instrument by the offices mentioned and the researcher's professor.

Procedure of Gathering Data

A survey and letter of introduction (Appendix B) from the Director of LLL, was mailed to 524 healthcare providers in March of 2004. Respondents were asked to return the completed survey in the addressed, stamped envelope which was enclosed with the survey. Gifts were included with 150 of the surveys: 50 pens, 50 notepads and 50 mint cases and the surveys were color coded on the back so that the response rate could be tracked for those receiving gifts. The health care providers were not contacted again after the survey was sent.

Data Analysis

The results were tabulated using EXCEL. A spreadsheet was designed with a column for each possible response on the survey. The surveys were assigned a unique survey number and the results of each survey were entered as a row of data on the spreadsheet. Where there was a response indicated on the survey, the data item was given a value of 1. If an actual number was given on the survey then that number was entered into the spreadsheet as in the number of employees projected by the respondent for the next three years. Where there was no response to a data item the value of zero was put in the spreadsheet. Summaries of each data item were then calculated. Percentages were
also calculated. Responses that were written on the survey were also put on the spreadsheet in a comment field.

Other data used in the study and not reflected in the tables were interviews with the Learning Resources Network (LERN) consultant, the New Jersey Department of Labor Statistician, and the Program Administrator of Continuing Education for Camden County College. Owners of employment agencies in the county were also interviewed about the demand for health care support jobs in the region. These data were used to further answer the research questions of the study.
CHAPTER FOUR

FINDINGS

Profile of the Survey Respondents

Of the 524 surveys that were mailed, 72 were returned for an overall return rate of 13.7%. The survey was sent to the entire population of medical offices in Gloucester county. The respondents included the offices of 61 medical doctors and doctors of osteopathy along with 6 dentists, 2 chiropractors and 1 podiatrist and 2 marked other. The breakdown, by title of the person who actually completed the survey, was 38 doctors, 25 office managers, 1 hospital administrator, 7 other and 1 not indicated.

A response rate of 13.7% is considered poor for academic research purposes. Therefore, the low response rate should be considered a limitation and potential source of bias to the study.

Research Questions

Research Question 1: What are the educational training needs for health science support occupations of selected healthcare providers in Gloucester County?

Table 4.1 provides information for research question number one. The data were taken from all 72 health care providers who responded to the mail survey. Medical coding and billing were rated the highest with 51 offices indicating a desire for employees trained in this occupation. Medical office administrators were rated next highest with 46 offices indicating a desire for employees trained in this occupation. Medical transcriptionists were rated next highest with 20 offices indicating a desire for employees trained in this occupation. Phlebotomists were rated next highest with 12
offices indicating a desire for employees trained in this occupation. X-Ray technicians were rated next highest with 8 offices indicating a desire for employees trained in this occupation. Dialysis technicians were rated last with 1 office indicating a desire for employees trained in this occupation.

Table 4.1

*Type of Training Desired for Current Staff and Projected New Staff Positions*

<table>
<thead>
<tr>
<th>Occupation Title</th>
<th>Total Number of Current Staff</th>
<th>Total Number of Projected New Jobs 2005-2007</th>
<th>Percentage Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Billing and Coding</td>
<td>51</td>
<td>46</td>
<td>90%</td>
</tr>
<tr>
<td>Medical Office Administrators</td>
<td>46</td>
<td>35.5</td>
<td>77%</td>
</tr>
<tr>
<td>Medical Transcription</td>
<td>20</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>Phlebotomist</td>
<td>12</td>
<td>7</td>
<td>58%</td>
</tr>
<tr>
<td>X-Ray Technician</td>
<td>8</td>
<td>18</td>
<td>125%</td>
</tr>
<tr>
<td>Dialysis Technician</td>
<td>1</td>
<td></td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 4.1 also shows the ranking of the number of projected new jobs in these occupations. Medical billing and coding was ranked highest with 46 new jobs projected for that occupation. Medical office administrator was ranked next highest with 35.5 new positions projected for that occupation. X-Ray technician was ranked next highest with 18 new positions projected. Medical transcription was ranked next highest with 10 positions projected for that occupation. Phlebotomist was ranked next highest with 7 positions projected for that occupation. Dialysis was ranked last with no projected positions in that occupation.
Research Question 2: Do the identified employment needs match up with the health science support occupations that are listed as qualifying for workforce development funds in Gloucester County?

Table 4.1, in the column titled Total Number of Projected New Jobs 2005-2007, shows a projected employment need for the occupations of medical office administrator, medical billing and coding, x-ray technician and possibly medical transcription. In 2003, when the study began, the website for the State of New Jersey Employment Information indicated the following occupations were in demand for Gloucester County: Medical Office Management, Medical Records Administration, Medical Records Technician, Medical Transcription, Medical Secretary, and Medical Assistant. In 2003, training for medical administration and for medical billing and coding and medical transcriptionist would have qualified for workforce development funds.

Table 4.2

"Demand" Occupations for Gloucester County 2003 and 2004 per NJ website

<table>
<thead>
<tr>
<th>Occupation Title</th>
<th>In Demand 2003</th>
<th>In Demand 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Office Management</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Medical Records Administration</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Medical Records Technician</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Medical Transcription</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Medical Secretary</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Medical Assistant</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Table 4.2 shows how the occupations that were listed under the category health service support occupations changed from 2003, when the study started, to 2004 when the study was completed. In 2004, the website for the State of New Jersey Employment Information indicated that the occupations Medical Office Management, Medical Records Administration, Medical Records Technician, Medical Transcription, Medical Secretary, and Medical Assistant were listed as “not in demand” for Gloucester County. This is important to note because if the occupation is listed as “not in demand” then the training for that occupation is not eligible for workforce funding.

The respondents were also asked about any additional training programs that they would desire for their staff. The training programs mentioned are displayed in Table 4.3.

Table 4.3

<table>
<thead>
<tr>
<th>Program</th>
<th>Number of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Assistant</td>
<td>6</td>
</tr>
<tr>
<td>Dental Assistant</td>
<td>4</td>
</tr>
<tr>
<td>Licensed Practical Nurse</td>
<td>3</td>
</tr>
<tr>
<td>Podiatric Assistant</td>
<td>3</td>
</tr>
<tr>
<td>Medical Receptionist</td>
<td>3</td>
</tr>
<tr>
<td>Dental Hygienist</td>
<td>2</td>
</tr>
<tr>
<td>Physical Therapist</td>
<td>1</td>
</tr>
<tr>
<td>Bookkeeper</td>
<td>1</td>
</tr>
<tr>
<td>Medical Secretary</td>
<td>1</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 4.3 shows that the program medical assistant was cited by 6 medical offices as being a desired training program, the program for dental assistants was cited by 4 dental offices, licensed practical nurse was cited by 3 medial offices, podiatric assistant was cited by 3 podiatry offices, medical receptionists was cited by 3 offices, dental hygienist was cited by 2 dental offices. The programs for physical therapy, bookkeeper, medical secretary and registered nurse were cited one time only.

Table 4.4

Certifications Required by Employers

<table>
<thead>
<tr>
<th>Type of Certification</th>
<th>Number of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certified Medical Assistant</td>
<td>21</td>
</tr>
<tr>
<td>Certified Medical Transcriptionist</td>
<td>2</td>
</tr>
<tr>
<td>Certification Not Required</td>
<td>32</td>
</tr>
</tbody>
</table>

Table 4.4 indicates the responses to question #5 about what certifications they require of their staff. The certification for medical assistant was required by 21 offices, The certification for medical transcriptionist was required by 2 offices, 32 offices indicated that they do not require certifications in either field.

Research Question 3: What programs should GCC develop that will meet the demand in the county and qualify for Workforce Development funding?

The data from the survey shows an employment need in the occupations of medical billing and coding and medical administrator. However the state information indicated that there was not an employment need in those occupations for 2004. In order to answer research question 3 the researcher needed to investigate further.
Two questions needed to be answered: 1) Why was the data from the State Department of Labor showing that the occupation of medical administrator was “not in demand” in 2004 when the data from the survey showed that there was an employment demand? 2) How was the neighboring community college advertising a program for medical administrator that qualified for workforce development funding when that occupation was listed as “not in demand?"

The first question about what data the state used to determine which occupations were in demand and which occupations were not in demand was answered by a statistician from the New Jersey Department of Labor and Planning (NJDOL) who indicated that the Occupation Demand List was made up by comparing the number of graduates from occupational training programs throughout the state to the number of jobs projected by potential employers. The researcher was told that although a whole cluster of jobs may be listed as not in demand, such as the human services category, that did not mean that there was low demand for a particular occupation within that cluster. The NJDOL representative indicated that it was difficult to have up-to-date information, especially at the county level. When told about the survey information that was collected by GCC, he recommended that GCC apply for the occupation to be put on the exception list for Gloucester County. Given the survey data, he thought the occupations medical billing and coding and medical administrator would be put on the exception list which would then qualify those programs for workforce development funding.

The second question was with the neighboring community college who was advertising a program for medical administrators that qualified for workforce development even though that occupation was listed as not in demand on the Occupation
Demand List. The program administrator of the neighboring community college stated that the enrollment for the medical administrators program was about 20 students each semester and that students were obtaining jobs upon graduation. The college was able to have the medical administrators program approved for workforce development by describing the program to be more of a secretarial type occupation. It qualified under the secretarial occupation code because the program included secretarial skills along with medical office skills. This solved the mystery as to how the neighboring college was able to advertise medical administration as eligible for workforce development funding. It also provided additional data demonstrating that there is a need for this type of training and that students are getting jobs upon graduation.

Further confirmation of the need for health care support positions was provided by the management of employment agencies within Gloucester County for temporary healthcare workers. The representatives from the employment agencies said they receive requests on a regular basis for personnel with medical billing and coding skills combined with computer skills; and for medical administrators along with LPN, RN, phlebotomists and nurse’s aides.
CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Summary of the Study

The Division of Lifelong Learning at Gloucester County College conducted a survey of medical offices in the county to determine what occupations they employed and what their projected employment need for those occupations was in the next three years. The purpose of the study was to determine if GCC should develop training programs for those occupations. GCC also wanted to provide training for occupations that would qualify for workforce development funding.

Over 500 surveys were mailed to medical offices in the county and responses were received from 72 offices. The research data indicated there was a need for training by the healthcare providers for the occupations medical coding and billing and medical administrators. The occupations of medical coding and billing and medical administrator were listed as “in demand” on the NJ Employment Information Website in 2003 which meant that persons pursuing training in those occupations could qualify for workforce development funding.

Discussion of the Findings

The results of this study were consistent with what was found by Pezzoli, Johnson and Lum (1998) in Hawaii in that health care providers need office workers who are specially trained to meet their unique needs. There is a diversity of titles used in medical offices with the titles medical assistant, medical administrator and medical secretary...
being used most often. This study found that formal certification as a medical assistant was required by approximately 35% of the healthcare providers.

The study conducted by Smith (2002) in Colorado focused on program development for healthcare occupations and tried to find out why enrollment was low in programs for healthcare occupations. Low pay and few opportunities for higher wages were found to be some of the causes for low enrollment along with the fact that many healthcare providers do on-the-job training. While these are notable findings, this study focused on the demand for training from the employer's perspective.

Since this study is confined to the local region, the experience of the neighboring community college was considered. Camden County College has been successfully offering programs for healthcare occupations that also qualify for workforce development funds and have been very successful in finding jobs for their graduates and keeping their classes.

This study found there was an employment need for the occupations of medical administrator and medical transcriptionist in Gloucester County which is consistent with the projected growth rate published by the New Jersey Bureau of Labor. It is also consistent with the employment history from 1999-2004 for medical assistants within the State of New Jersey.

The results were computed by March, 2004, although the study began in 2003. In order to determine if Gloucester County College should pursue development of programs for these occupations the workforce development data for 2004 needed to be considered. The reason the workforce development data was important was because those were the students GCC was hoping to attract. In March 2004, the occupations of medical
administrator and medical transcriptionist were not listed as being “demand” occupations for Gloucester County by the State of New Jersey. This meant that training programs for these occupations would not qualify for workforce development funding. The recommendation on whether to pursue program development was closely tied to the program’s eligibility for workforce development funding.

Two questions needed to be answered: 1) Why was the data from the State Department of Labor showing that the occupation of medical administrator was “not in demand” in 2004 when the data from the survey showed that there was an employment demand? 2) How was the neighboring community college advertising a program for medical administrator that qualified for workforce development funding when that occupation was listed as “not in demand?”

The first question about what data the state used to determine which occupations were in demand and which occupations were not in demand was answered by a statistician from the New Jersey Department of Labor and Planning (NJDOL) who indicated that the Occupation Demand List was made up by comparing the number of graduates from occupational training programs throughout the state to the number of jobs projected by potential employers. The researcher was told that although a whole cluster of jobs may be listed as not in demand, such as the human services category, that did not mean that there was low demand for a particular occupation within that cluster. The NJDOL representative indicated that it was difficult to have up-to-date information, especially at the county level. When told about the survey information that was collected by GCC, he recommended that GCC apply for the occupation to be put on the exception list for Gloucester County. Given the survey data, he thought the occupations medical
billing and coding and medical administrator would be put on the exception list which would then qualify those programs for workforce development funding.

The second question was with the neighboring community college who was advertising a program for medical administrators that qualified for workforce development even though that occupation was listed as not in demand on the Occupation Demand List. The program administrator of the neighboring community college stated that the enrollment for the medical administrators program was about 20 students each semester and that students were obtaining jobs upon graduation. The college was able to have the medical administrators program approved for workforce development by describing the program to be more of a secretarial type occupation. It qualified under the secretarial occupation code because the program included secretarial skills along with medical office skills. This solved the mystery as to how the neighboring college was able to advertise medical administration as eligible for workforce development funding. It also provided additional data demonstrating that there is a need for this type of training and that students are getting jobs upon graduation.

Further confirmation of the need for health care support positions was provided by the management of employment agencies within Gloucester County for temporary healthcare workers. The representatives from the employment agencies said they receive requests on a regular basis for personnel with medical billing and coding skills combined with computer skills; and for medical administrators along with LPN, RN, phlebotomists and nurse’s aides.
Conclusions

Based on the findings of the study, it can be concluded that there is a need in Gloucester County for employees with training in medical administration and medical billing and coding. It can also be concluded that there is projected growth in the number of these positions needed by medical offices for the next three years in Gloucester County. Data from the study showed that training for the occupations of medical assistant and medical billing and coding can be classified as eligible for workforce development funding. Thus, the GCC Division of LLL and relevant academic departments should proceed in developing a program for medical administrators.

Recommendations

As recommended by Caffarella (2002), an advisory board should be organized for the desired programs. Those respondents to the survey that indicated an interest in serving on the advisory board should be contacted. The academic dean of Gloucester County College should also be advised of the results of the survey so that discussions can begin between the credit side and the non-credit side of the college on how to develop and implement a program.

The steps outlined by Caffarella (2002) should be followed in developing the program such as: establishing program objectives and instructional plans along with learning objectives; deciding on instructional techniques, instructors and resources; planning for assessment and transfer of learning; preparing budgets and marketing plans; coordinating facilities and administrative duties.
The program should be planned to take into consideration the needs of adult learners as described by Simerly (1989) and Kowalski (1988). Adults demand a high level of relevance, are very motivated and are capable of learning as they age.

The college should also consider Knowles' recommendations for students and providers to have input regarding content, methodology, learning assessment techniques and program design.

The program requirements of the Workforce Development Act need to be taken into consideration when planning the program because there are regulations on the number of hours students have to attend class and the time frame for completion of the program.

**Further Research**

1. Further research needs to be conducted to determine the employment need for the occupations of phlebotomist, x-ray technician and dialysis technician in Gloucester County because the employers who hire within these occupations were not surveyed in this study. In order to gather valid data for those occupations, hospitals and labs who employ those occupations should be surveyed.

2. Community colleges and proprietary schools are in competition for the same students. Research should be conducted at the local level to see what the differences are between the two options for the student and how does that effect the expenditure for the county.

3. It is recommended that the survey used in this study be conducted again county-wide in order to get a larger response rate. The responses from the second survey...
should then be compared with responses from this study in order to validate the conclusions reached in this study.

4. The survey used in this study should also be conducted on a statewide basis to determine what the educational needs and employment needs are throughout the state for the occupations of medical assistant and medical transcriptionists.
REFERENCES


APPENDIX A

Institutional Review Board

Application for Review of Research

and

Disposition Form
INSTITUTIONAL REVIEW BOARD
APPLICATION FOR REVIEW OF RESEARCH

1. Type of approval review requested (check one): Full Review  Expedited Review  ✔ Review Exemption

2. PRINCIPAL INVESTIGATOR: MAUREEN D'ANDREA

3. DEPARTMENT: Higher Ed Leadership
   TITLE OF RESEARCH: Healthcare Training Needs in Gloucester County, NJ

CO-INVESTIGATORS: ________________________________

PURPOSE OF RESEARCH (INDEPENDENT PROJECT, MASTER'S THESIS, ETC.): Master's Thesis

4. IF YOU ARE A STUDENT RESEARCHER PLEASE PROVIDE THE FOLLOWING:

   MAILING ADDRESS: 1103 Sycamore St
   EMAIL: mdandrea@geconj.edu  TELEPHONE NO. 856-915-2270
   FACULTY SPONSOR NAME: DR. BURTON SISCO
   DEPARTMENT OF SPONSORING FACULTY: Higher Ed
   PHONE NO. ___________ FAX NO. ___________ EMAIL: _______________________
   FACULTY SPONSOR SIGNATURE: ________________________________

   DATE: _______________________

5. HAS THIS RESEARCH PROJECT BEEN CONSIDERED PREVIOUSLY BY THE IRB? YES  NO  ✔

IF YES, GIVE DATE OF LAST REVIEW: ______________________
7. ARE YOU WORKING WITH A RESEARCHER FROM ANOTHER INSTITUTION? IF SO, BE AWARE THAT YOUR CO-INVESTIGATOR MUST ALSO SUBMIT YOUR JOINT PROPOSAL TO THE IRB AT THE INSTITUTION THAT EMPLOYS HIM/HER. ______YES ______NO

8. DOES YOUR RESEARCH INVOLVE ANY OF THE FOLLOWING (CHECK ALL THAT APPLY)?

- minors
- prisoners
- pregnant women
- use of the investigators current students as subjects
- drugs or other controlled substances
- psychological or physiological stress above the level of normal everyday activities
- misleading or deceiving subjects about any aspect or purpose of the research
- collection of information which deals with sensitive aspects of the behavior (e.g., illegal activity, drug or alcohol use, sexual behavior)
- collection of information which would place subjects at risk of criminal or civil liability if it became known
- collection of information which could affect subjects' financial standing, employability, or reputation if it became known.
- examination of existing data, documents, or specimens that are not part of the public record
- children involved in your research without sensitive information about themselves or their families.
- collecting or studying existing data, documents, records, pathological specimens or diagnostic specimens, which are publicly available and from which participants cannot be identified by anyone other than the investigator(s).

9. WHAT IS THE OBJECTIVE OF THE RESEARCH?

To determine training needs for healthcare providers

10. DESCRIBE THE DESIGN OF THE RESEARCH INCLUDING WHAT WILL BE REQUIRED OF SUBJECTS (ATTACH ADDITIONAL SHEET IF NECESSARY):

survey & cover letter
INSTITUTIONAL REVIEW BOARD
DISPOSITION FORM

Maureen D'Amore
Principal Investigator
1103 Sycamore St
Address of Principal Investigator
HADDON HEIGHTS, NJ 08035
City, State, and Zip Code
856-415-2220
Telephone # Fax # e-mail address

Co-Principal Investigator (if applicable)
Address of Co-Principal Investigator
City, State, and Zip Code
Telephone # Fax # e-mail address

TITLE OF RESEARCH

ADMINISTRATIVE DISPOSITION - DO NOT WRITE BELOW THIS LINE

Your claim for exemption for the research study identified above has been reviewed. The action taken is indicated below:

APPROVED FOR EXEMPTION AS CLAIMED: CATEGORY #
Note: Anything that materially changes the exempt status of this study must be presented to the IRB for approval before the changes are implemented. Such modifications should be sent to the IRB Office at the address above.

APPROVED FOR EXEMPTION - BUT NOT AS CLAIMED. Your claim for exemption does not fit the criteria for exemption designated in your proposal. However, the study does meet the criteria for exemption under CATEGORY #.

A determination regarding the exempt status of this study cannot be made at this time. Additional information is required.

Your proposal does not meet the criteria for exemption, and a full review will be provided by the IRB.

EXPEDITED REVIEW: Approved Denied

FULL REVIEW: Approved Approved with modifications Denied

DENIED: See attached Committee Action Letter for additional comments.

Chair, IRB 3/10/04
Date

Co-Chair, IRB 3/10/04
Date
APPENDIX B

Letter of Introduction
Dear Healthcare Provider,

As part of Gloucester County College's continuing commitment to meeting the needs of the changing workplace, the Division of Lifelong Learning is considering the adoption of new non-credit programs for the health service field. National statistics show that there is a growing need for workers in many healthcare related fields. Your input as a potential employer is essential to insure we are meeting your training needs.

Please take a few minutes to respond to each of the questions on the enclosed survey, and then return the completed survey to us in the envelope provided. Naturally all responses will be kept strictly confidential and reported as group data only.

If you have any questions, or if you would like to discuss your training needs with me personally, please contact me at 856-415-2263 or by email at mpennell@gccnj.edu. Thank you for your help.

Sincerely,

Molly Pennell

Director, Lifelong Learning
New programs for healthcare related fields are being considered to fill the labor demands of the county. Your response will help to determine where to focus our training resources to meet your needs.

1. Type of business:
   Medical Office  Hospital  Other

2. What training is desired for your current staff? Please check all that apply.

<table>
<thead>
<tr>
<th>Check here</th>
<th>check here</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Office Administration</td>
<td>Dialysis Technician</td>
</tr>
<tr>
<td>Medical Billing and Coding</td>
<td>Phlebotomist</td>
</tr>
<tr>
<td>Medical Transcription</td>
<td>X-Ray Technician</td>
</tr>
</tbody>
</table>

3. Please list any additional types of training you desire.

4. Please indicate the number of positions you expect to add to your office in the next three years.

<table>
<thead>
<tr>
<th>Number</th>
<th>number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Office Administration</td>
<td>Dialysis Technician</td>
</tr>
<tr>
<td>Medical Billing and Coding</td>
<td>Phlebotomist</td>
</tr>
<tr>
<td>Medical Transcription</td>
<td>X-Ray Technician</td>
</tr>
</tbody>
</table>

5. Do you require your employees to be certified in their specific field? If yes, what certification(s) do you require?

<table>
<thead>
<tr>
<th>Check here</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certified Medical Assistant</td>
</tr>
<tr>
<td>Certified Medical Transcriptionist</td>
</tr>
<tr>
<td>Certification not required</td>
</tr>
</tbody>
</table>

6. What is the title of the person completing the survey?

<table>
<thead>
<tr>
<th>Check here</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor /owner</td>
</tr>
<tr>
<td>Hospital Administrator</td>
</tr>
<tr>
<td>Office Manager</td>
</tr>
<tr>
<td>Other (specify title)</td>
</tr>
</tbody>
</table>

All responses will be kept confidential. As we move forward with our planning we anticipate forming an advisory group. If you are interested in serving in this capacity please complete the contact information below.

Name
Address
E-mail address
Telephone Number

Thank you for your time in completing this survey. Please return the survey in the enclosed envelope.