

Follow-up Study of Medical Assistant Graduates at Western Technical College

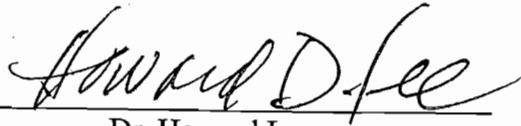
by

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A handwritten signature in cursive script, reading "Howard Lee", written over a horizontal line.

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ABSTRACT

The purpose of the study was to determine the career satisfaction and continued education plans for the 2003 through 2007 Medical Assistant Program graduates of Western Technical College. The study also intended to determine if the availability of Associate level courses, or the information about the availability of such courses, would have been of interest to these graduates while they were students in the program.

Data was collected from 53 graduates, with 94% of the respondents reporting career satisfaction and employed in health care, and 84% employed as medical assistants. Career change and continuing health related education was reported by 52% of the respondents, with LPN and RN programs identified most often as careers or programs of choice.

Data reviewed suggested a strong interest in knowing about and having the option to substitute the three Associate level courses identified in the survey instrument for the corresponding Diploma courses in the Medical Assistant Program.

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Chapter 1

Introduction

Background for the Study

Medical assistants have been referred to as health care's most versatile professionals. The profession of medical assisting was formally recognized by the United States Department of Education in 1978. In 1991, the American Association of Medical Assistants (AAMA) approved the present definition of medical assisting: "Medical Assisting is a multi-skilled allied health profession whose practitioners work primarily in ambulatory setting such as offices and clinics. Medical assistants function as members of the health care delivery team and are trained to perform administrative and clinical procedures" (Beaman, N., & Fleming-McPhillips, L., 2007).

Medical assistants are trained for clinical duties, which may include assisting with office surgery, obtaining vital signs, administering medications, as well as performing phlebotomy, basic laboratory tests, electrocardiograms, and vision screening. Medical terminology, computer skills, and administrative duties such as reception, billing, insurance, and payroll are also part of course content (Beaman, N., & Fleming-McPhillips, L., 2007).

Western Technical College (Western) in La Crosse, Wisconsin is one of 16 technical college systems in the State of Wisconsin Technical College System (Wisconsin Technical College System, 2007). This college offers 70 programs and served approximately 21,000 students during the 2005-2006 academic year. These 70 programs consist of certificate, diploma, and associate degree programs at Western

(Academic Quality Improvement Project (AQIP), 2007). The certificate programs usually require several weeks or several months to complete and involve supervised on-site work experience. The diploma programs are usually one year of full time study and involve technical skills learned in the classroom, as well as on-site work experience. The associate degree programs require two years of full time study, involve technical skills learned in the classroom, as well as on-site experience, and require more academic experience than the diploma programs. Western offers eight allied health associate degree programs as well as nursing. The Medical Assistant Program is one of seven allied health diploma programs (Western Technical College, 2007). Western Graduate Placement Bulletins from 1993 to 2007 indicate that the MA Program has seen 90% or better job placement in related employment fields within six months of graduation, and 95% of these graduates found initial employment in medical clinics within the 11 counties that make up the Western District.

Job outlook for all health care occupations, and especially for medical assistants, is good. According to data from the 2007 Bureau of Labor Statistics, the job outlook for medical assistants remains strong nationwide through 2016. Comparison of the health care careers shows that the salary rate and expected rate of increase looks very different for the associate and higher educated professions versus the diploma and certificate professions (U.S. Bureau of Labor Statistics, 2008). The Bureau of Labor Statistics rates some of the fastest growing occupations, such as the certificate programs of home health aides and personal care aides, very low on a salary scale from very low to very

high. Medical assistant (MA) salaries are rated as low while nurses are rated very high (U.S. Bureau of Labor Statistics, 2007).

Western Technical College currently has articulation agreements with Viterbo University in La Crosse, Wisconsin, and the University of Wisconsin, La Crosse, Wisconsin for several health care professions, including nursing (Western Technical College, 2007). These articulation agreements are prepared for the associate program and as the Medical Assistant Program at Western is a diploma program, no articulation agreements exist.

Western Technical College's mission statement declares a commitment to excellence in learning, continuous improvement, student success, employer satisfaction, and community partnerships. This mission statement provided the impetus for the development of plans for continuous improvement by every department and program at Western. The Vision Statement "to be a collaborative, innovative education leading the community" provided the impetus for departments and programs to address strategic challenges, including the challenges to align resources and services to support ever-changing needs and expectations of diverse student segments (AQIP, 2007).

In September 2000, Western was selected as one of 13 charter organizations to participate in an alternative accreditation process through Academic Quality Improvement Project (AQIP). AQIP is designed to align accreditation with an organization's program of continuous quality improvement and is a component of the Higher Learning Commission of the North Central Association. By joining AQIP, Western has been involved in

numerous data gathering activities to cover all of the commitments declared in the mission, vision and value (AQIP, 2007).

Western Technical College lists seven values including one on measuring the effectiveness of the services provided by the school (AQIP, 2007). Methods were developed to track effectiveness based upon the college's strategic priorities: Enrollment, Retention, Learning, and Satisfaction. As part of the Student Learning Assessment, each program at Western has a student-learning outcome with criteria for assessment that the students complete prior to graduation from a program. The most recent available information from Western shows a 97% college-wide satisfaction score with training from graduating students (AQIP, 2007). Western's Medical Assistant Program has shown 100% student satisfaction with the training since 2003 (Western Technical College, 2007). A graduate follow-up survey has been developed by the statistical department and has been sent to students six months to one year following graduation. The main purpose of this survey is to address job placement and salary. Western's results are compiled with the findings of the other 15 colleges in the WTCS, and areas of the state are then compared.

Discussion has occurred at meetings with area high school counselors, principals and Western's Division of Health and Safety Associate Dean concerning the transferability of credits from one program to another. According to Laurie Raddatz, Associate Dean of Allied Health at Western, area high school principals and counselors have questioned the inability of students from diploma health programs, including the Medical Assistant Program, to transfer their credits to the nursing program, or other associate degree program at Western (Raddatz, 2007).

Discussions on state curriculums and transferability from one program to another have occurred at meetings of Medical Assistant Program Directors of the 16 technical colleges in the state. These discussions have resulted in the same question often arising; how many of the graduates from each represented school really wish to continue to an associate degree or higher in a health program? These representatives have been reluctant to change the curriculum to include additional associate level courses for fear of eliminating students who may not succeed at associate level courses. The possession of facts and figures from Western's Medical Assistant Program graduates would be most helpful at state meetings of Medical Assistant Program Directors when curriculum changes are discussed and in discussions with area high school counselors and principals.

Statement of the Problem

While Western has numerous surveys developed at the college level to address satisfaction with the college, its services, the education received, job placement and salaries, there has never been a follow-up survey regarding career satisfaction done specifically for the Western Medical Assistant Program. No information is available regarding how many Western graduates of the Medical Assistant Program are, or may be in the future, interested in seeking further education in a health related field. No current information is available regarding how many Western graduates of the Medical Assistant Program would have taken associate level courses to assist in the process of returning to school if they had known these courses were available. No research has been done into the number of Western medical assistant graduates who have returned to school to further their education in health care or the challenges they faced with transfer of

credit from the Medical Assistant Program to an associate program or baccalaureate program.

Purpose of the Study

The purpose of this study was to survey Western Medical Assistant graduates from 2003 through 2007 to determine career satisfaction and attitudes, or plans regarding future education in the health care field.

Definitions of Terms

<i>Allied Health</i>	Professions in health care other than dentists, physicians, and nurses
<i>BSN</i>	Bachelor of Science degree in nursing
<i>LPN</i>	Licensed practical nurse that has completed approximately 12 months of training at a vocational school
<i>LVN</i>	Licensed vocational nurse that has completed approximately 12 months of training at a vocational school and used interchangeably with LPN
<i>Nurse</i>	Used interchangeably with Registered Nurse and indicates a person who has taken and passed the national board of nursing exam and is licensed to practice nursing under the direction of a physician
<i>Phlebotomy</i>	Incision into a vein for the purpose of drawing a blood sample

Objectives of the Study

This study focused on addressing the following objectives:

1. Determine medical assistant career satisfaction for Western Medical Assistant Program graduates from 2003 through 2007. The objective here is to determine

simple job satisfaction and not to determine all of the reasons why graduates may or may not be satisfied.

2. Determine medical assistant graduate plans for career continuance or career change. Graduates who enter the profession of medical assistant may find that they share some of the same job duties as Licensed Practical Nurses (LPN) and Registered Nurses (RN). The realization that others are being paid much more while doing some of the same job duties, as the medical assistant may, encourage some to continue their education.
3. Determine the level of importance to the graduates of having the option of taking associate level courses in place of diploma courses while in the Medical Assistant Program. Some students may enter the Medical Assistant Program knowing that they are going to continue on to another health care program but wish to work to obtain experience or tuition reimbursement from an employer. Some associate health programs have long waiting lists so some students enter a shorter program to gain classroom experience and knowledge.
4. Identify any differences in career satisfaction, career plans and importance of career options in different graduates' age and nationalities.

Rationale

1. This information has added to the present knowledge about medical assistant graduates.
2. This study has provided information about job and career satisfaction of medical assistant graduates that area high school counselors, principals, and Western

counselors can use when advising students. Western health programs utilize online orientations for students while counselors provide occasional orientation information. This study has provided information to help Western counselors as well as provided information to assist the development of concise, useful and necessary information for the online orientation.

3. This study has provided Western administrative staff information necessary for discussion and decision-making regarding growth and expansion of courses and programs, related staffing issues as well as published materials for marketing. These are all budget items and this information is necessary in planning for changing community and student needs.

Limitations of the Study

1. This study was limited to the responses of Western Technical College's Medical Assistant Program graduates from 2003 through 2007. These graduates were chosen as they had experience with online courses and a daily class schedule that had some open periods. The lack of open periods would have made taking other courses an option not available to students graduating prior to 2003.
2. The potential for the presence of bias on the part of the medical assistant graduates thinking they should have plans to return to school or further their education upon reading the survey was a concern. This was not the intention. The intention was to obtain information about course offerings and options from those that did continue their education.

3. The study was developed for Western Technical College and has limited generality for other technical colleges. The job market and salaries in other communities would influence career change and further education decisions. The availability of online courses would also influence course schedules and course availability.

Methodology

A descriptive research design was used for this study. In order to meet the study objectives, data from program graduates was needed. There the appropriate research method was a follow-up survey of graduates. Realizing that graduates who had experience with online learning would be necessary for this study, it was decided to survey graduates who completed Western's Medical Assistant Program between May of 2003 and December of 2007.

Chapter II

Literature Review

Medical assistants perform many of the same tasks that more highly trained health professionals perform and the medical assistant receives lower pay. Medical assistants can perform phlebotomy, basic laboratory tests, give immunizations and other injections, obtain electrocardiograms and can be trained to start intravenous lines for fluid administration, and perform radiography. Even though these tasks overlap to some extent with other allied health fields, remuneration is lower for medical assistants than for these other health professionals. The background clinical knowledge and judgment is not comparable to more highly trained professionals but as they work in a medical clinic, licensed medical providers are available, and the medical assistant works under this individual's license (Tache & Chapman, 2006).

Western has been interested in the number of medical assistants that return to school to advance their degrees and how much of a perceived barrier exists when transferring credits from the diploma program to an associate program. Review of literature presented two major health care trends and one educational trend. Job outlook in health care, the relationship between education and wages in health care occupations, and career satisfaction were reviewed. The increase in online course offerings at the secondary level was also reviewed.

Health Care Trends and Staffing Issues

Health care is ever changing and many of these changes have been related to finances. Cost containment has been a major issue of healthcare since 1983 when the Health Care Financing Administration adopted a plan called Diagnosis-Related Groups. This is a prospective method of payment in which hospitals are paid a flat fee for patients. This fee is based on the average cost of service and not the actual cost of service for a particular patient.

Managed health care, with health maintenance organizations being one type of managed care, is a common term in the United States. As with Medicare, physicians are no longer paid for the actual cost of service with managed health, as managed care offers prepaid health care for a fixed fee to subscribers, or patients, in a designated geographical area. If the subscriber requires numerous visits to a clinic or requires complicated medical procedures, the fixed fee paid to the managed health care system may be exceeded and no profits made. Therefore, managed health care systems strive to emphasize preventive medicine (Beaman & Fleming-McPhillips, 2007).

Because of these cost containment issues, financial managers and physicians in medical clinics are hiring multi-skilled workers at a lower salary rate than they have historically paid nurses. When medical clinics first started, physicians often hired nurses for the clinical aspects and trained other individuals on the job for the administrative duties, which included reception and billing. While realizing that the nurses are vitally important in a hospital situation, nurses are not trained in the variety of duties required in today's medical offices and ambulatory care centers. Physicians and administrators have been utilizing a

trained diploma graduate who can perform both administrative and clinical duties at a lower salary rate than nurses. This is the role of the medical assistant. Cost containment issues have clinic and hospital administrators hiring educated and credentialed medical staff that know the requirements of the job and have an understanding of health care topics and issues (Hunt 2002). These trained staff may hold certificates or diplomas and are historically paid less than nurses (U.S. Bureau of Labor Statistics, 2008).

United States Department of Labor points out that health care service will account for almost one-fifth of all job growth from 2006 to 2016 (Dohm & Shniper, 2007). Factors contributing to continued growth in this industry include the aging population, which will continue to require more services, and the increased use of technology for intensive diagnosis and treatment. Patients will increasingly be shifted out of hospitals and into outpatient facilities, nursing homes and home health care in an attempt to contain costs (Meyers, 2007).

While cost containment is one of the factors influencing the changes seen in health care today, the aging of American baby boomers has also influenced the health care industry. Not only is the average age of the American population getting older, Americans are living longer. "People 65 years or older numbered 36.8 million in 2005 and represented 12.4% of the U.S. population. By 2030, this number will almost double to 71.5 million and represent approximately 20% of the population" (Meyers, 2007). The population over 85 is expected to double from 2000 to 2030, and increase nearly four times from 2000 to 2050 (U.S. Census Bureau, 2004). Currently one of eight residents in Wisconsin is 65 years of age or older. By 2020, the ratio likely will be one of six, and by 2030, one of five (Black-

Radloff, 2007). Individuals 65 and older currently account for 40 to 50% of hospital bed days so it is easy to see how health care needs will increase when the number of people 65 and older doubles by 2030 (Meyers, 2007).

The cost containment issues facing hospitals and the aging of America have made one of the strongest trends in health care, that of providing more non-hospital care, either in the patient's home or other non-hospital facility. The increased use of innovations in medical technology for intensive diagnosis and treatment also plays a major role in the changing field of health care. Organ transplants are now being done in hospitals throughout the United States, and open-heart surgery is performed much more commonly than ten years ago. Every major procedure requires the efforts of numerous health care professionals such as registered nurses, surgical technicians, respiratory therapists, and physical therapists, as well as behind the scenes staff in laboratories, medical filing departments and medical clinics (Hunt, 2002).

Health care occupations have a promising outlook through 2016. Of the ten fastest-growing professions in America from 2006 to 2016, five are health care related (U.S. Bureau of Labor Statistics, 2007). The same report shows Medical Assistants ranked eighth in the list of top ten fastest-growing professions in America with a 35% projected growth from 2006 to 2016. The top ten health occupations in Wisconsin, with the most total openings, listed registered nurses first followed by nursing aides, home health aides, and medical assistants in fourth position (Black-Radloff, 2007). This same report listed medical assistants third in the top ten health occupations with the greatest

growth in new jobs, and third in the top ten occupations with the largest percentage growth.

Due to the expected openings for nurses, medical assistants, and other health care workers, there is concern about a shortage of people to fill these positions, especially nurses. The nursing shortage is an issue addressed by Wisconsin Department of Workforce Development Secretary, Roberta Gassman, in an April 11, 2007 news release. Secretary Gassman noted that Governor Doyle has given support to health care reform in Wisconsin including plans to offer budget initiatives to support graduating more registered nurses and avoid a shortage in that occupation in Wisconsin. Secretary Gassman advised that there currently are too many variables and unknown factors that could influence the statistics that currently indicate that Wisconsin should have sufficient nurses to meet projected needs over the next 10 to 30 years. Factors like migration of healthcare graduates in and out of Wisconsin and retirements from healthcare will influence the future ability to meet needs as will the number of students enrolling in nursing, medical assisting, and other health care careers. Besides registered nurses, other health care occupations will show an increase in demand as well including medical assistants, dental assistants and hygienists, emergency medical technicians, and paramedics to name a few (Black-Radloff, 2007).

The nursing shortage is not confined to Wisconsin as the nation's supply of registered nurses was estimated at 1.89 million in the year 2000, while the demand was estimated at two million for a shortage of 110,000 (Longley, 2002). In the January/February 2007 issue of Health Affairs, Dr. David I. Auerbach and colleagues

estimated that the U.S. shortage of RN's will increase to 340,000 by the year 2020 (Auerbach, Buerhaus, & Staiger, 2007). On August 2, 2002, President Bush signed into law the Nurse Reinvestment Act, which was designed to encourage people to enter and remain in nursing careers; helping to alleviate the nation's nursing shortage. This law also established scholarships, loan repayments, retention grants, career ladders, and loan cancellation for nursing faculty with funding for these programs provided through 2007 (Longley, 2002).

Education and Wages

According to the 2007 Bureau of Labor Statistics reports, education is essential in getting a high paying job. High school graduates who take even a few vocational courses can make several thousand dollars more in pay every year. The 2006 median weekly earnings for a person with less than a high school diploma was \$419, a high school graduate was \$595, a person with some college but no degree had a median weekly earnings of \$674 and an individual with an associate degree had a median weekly earnings of \$721. The bachelor's degree took the fulltime median salary of a person over the age of 25 to \$962 (U.S. Bureau of Labor Statistics, 2008). The correlation between more education and higher earnings can be seen in the earning expectations where the median earnings in 2006 for registered nurses was \$57,280 (U.S. Bureau of Labor Statistics, 2007) and medical assistants was \$26,290 (U.S. Bureau of Labor Statistics, 2007). The correlation between education and earnings is true for Western graduates as well. Medical assistant graduates with a diploma from Western can expect higher wages than health aides and personal care aides but not near the salaries that Western nursing graduates with an

associate degree will earn. Associate nurses who completed their program at Western between July 1, 2005 and June 30, 2006 had median annual earning of \$45,760. Western's medical assistant diploma students who completed the program during the same time period had a median annual earning of \$23,788 (Western Graduate Placement, 2007). While diploma nurses and those with a baccalaureate in nursing (BSN) may start with close to the same salaries, some career paths are open only to nurses with a bachelor's or master's degree. A bachelor's degree often is necessary for administrative and teaching positions. Individuals who complete a bachelor's degree receive more training in areas such as communication and leadership, and nursing care becomes more complex (U.S. Bureau of Labor Statistics, 2007).

The shortage of registered nurses includes a shortage of registered nurses at the baccalaureate level (Jacobs, 2006). As diploma prepared nurses seek promotions, they are increasingly encouraged to secure a baccalaureate degree in nursing. The National Advisory Council of Nurse Education and Practice recommended in 2001 that at least two thirds of all Registered Nurses have BSN degrees or higher by 2010. In 2001, approximately 43% of nurses held degrees at the baccalaureate level or higher (National Advisory Council of Nurse Education and Practice, 2001). Jacobs (2006) found that while many nurses were encouraged by their employers to obtain a BSN degree and wanted to do so, they did not know how to obtain information about educational opportunities or financial support. She found that these nurses also felt they had not had the time to locate this information and start school. Wichita State University in Kansas determined that while an articulation plan between an associate and baccalaureate nursing program was indeed

very helpful, information about the articulation agreement and requirements to be met was not readily available to potential students. Waiting for students to express interest in continuing their education was not acceptable as information about the BSN degree would have been more beneficial when students first entered an Associate Degree program. The school developed clear marketing materials and revised some course sequencing to help nurses begin BSN degrees while in an AD program. The articulation information was clear, visible, available, and included prerequisite course work to be taken at area community colleges. This information was constructed to reduce the number of courses eventually taken by the students as they could take courses early in their program that were not required for the associate degree but would apply toward the BSN degree. Through this planning it was possible for some students to have met all prerequisites for the BSN program by the time they graduated from the AD program (Jacobs, 2006).

Web Based Learning

Currently enrollment in online programs at postsecondary schools exceeds 2.35 million nationwide. Web based technology has greatly impacted the availability, and use of information in the transition from high school to college (Brown & Corkill, 2007). Community college students constitute almost half of all enrolled under-graduate college students (Purcell, 2006). Community college transfer students, an emerging demographic trend, can be expected to use the Web for information and guidance in the transition from one-year to two-year programs, and from two-year to four-year institutions (de la Torre, 2007).

Early access to career and transfer-related information becomes critical since those students who begin with a goal of obtaining an associate or bachelor's degree are more likely to reach that goal (de la Torre, 2007). One way to enable community college transfer students to attain these degrees is to increase the likelihood that their credits will be accepted (Black-Radloff, 2007). Phyllis Jacob's 2006 research concluded that making information clearly available to all students about future transfer options was of utmost importance in recruiting and retaining students. The students wanted all information about future transfer and articulation options easily and readily available and the placement of the information on the Web met this need.

One of the strategies to help associate degree nurses advance their degree to the BSN is online learning. Phyllis Jacobs (2006) reported that Wichita State University in Kansas has all but one nursing course taught online. This was done so new graduates who work at night could manage to fit the courses into their schedules. One survey of online learning indicated that 56% of those surveyed appreciated the time and location flexibility that Internet learning offered, 90% indicated their experience was just as good or better than a regular classroom, and 84% said they would recommend online education to others (Gansler, 2006).

In 2002, Western's Medical Assistant Program was encouraged by area medical clinics to increase the number of graduation dates to better meet the staffing needs of the clinics. Several changes took place in Western's Medical Assistant Program in 2003 such as increased enrollment and two start dates (Advisory Committee Minutes, 2002). In July of 2004, an evening program was initiated with graduation in August of 2005. While this was

done only once for financial reasons, the fact that there were students interested in taking evening courses indicated a need for making program courses available at times and in methods other than daytime lecture courses. To meet this need for course availability at a variety of times, an increase in online course offerings in the Medical Assistant Program has occurred every semester since the fall of 2003 until the fall of 2007 (Advisory Committee Minutes, 2003).

In 2002, the medical assistant's schedule consisted of six to seven hours of class lecture or laboratory five days a week, and any attempt to take any courses outside of the required courses for the Medical Assistant Program would not have been possible due to scheduling conflicts (Advisory Committee Minutes, 2002). Offering courses online has reduced the face-to-face time each day and therefore has opened up the schedule for students.

While taking elective courses or associate level courses in place of the diploma course might increase the credit load, the workload, and possibly the expense for the medical assistant student, these courses could be taken before entering the program specific courses and the student would be prepared for transfer to an associate or baccalaureate program at a later date. Currently no written explanation of the option to take some associate level courses in addition to or in place of diploma courses in the Medical Assistant Program exists.

Career Satisfaction

According to Tom W. Smith (2007), Director of the General Social Survey (GSS) at the National Opinion Research Center at the University of Chicago, the most satisfying careers were reported as those that involve caring, teaching, protecting others, and creative

pursuits. Smith reports that the GSS survey is the most comprehensive of its kind to explore satisfaction among American workers with a total of 27,587 people randomly surveyed for this study. The survey found that across all occupations, 47% of the people were very satisfied with their careers.

The Society of Human Resources Managers (SHRM) job satisfaction 2007 survey reports that 79% of surveyed employees were satisfied with their current positions and nearly four out of ten were very satisfied. The top five factors reported necessary for job satisfaction was compensation, benefits, job security, work/life balance, and communication between employees and senior management. Compensation and benefits were tied for first place in importance with 59% of all workers surveyed reporting these two factors very important to job satisfaction (Society for Human Resource Management, 2007). According to executive director, Diane Dormeyer (2007) of Office Team, an agency specializing in temporary placement of highly skilled administrative professionals, their survey report in 2007 found that 48% of workers placed a bonus or raise at the top of their wish list at work.

Career Education Corporation of Hoffman Estates, Illinois conducted a study with differing results. Nearly half of the working adults surveyed reported considering not only changing jobs but changing careers, and one in four said that they expected to make such a change within the following 12 months. Although money was given as the prime motive for change, personal happiness was close behind (Brown B. , 2001). Dormeyer (2007) reported that the Robert Half International and CareerBuilder.com Employment, Dynamics and Growth Expectations Report indicated more than 25% of employees surveyed said they

were currently looking for a new job, and 44% said they were likely to leave their employer for another position in the next three years.

Brown (2001) pointed out that employment security today is no longer tied to one organization, but rather to the employee's career management and resilience skills. Some workers have found themselves suddenly involved in a career change with mergers, acquisitions and downsizing, while others have had time to think about what they want and do some planning. In 1999, B. Moses pointed out that the world of work is an uncertain world where skills, optimism and belief in oneself have become necessary to survive. Workers who are aware of their interests, strengths, and values experience the greatest success finding satisfying employment in a satisfying career (Brown B. , 2001).

There have been many changes in the health care system, including cost-containment efforts, the increased growth of managed care, and shortages of many health professionals. A 2001 survey of nursing and allied health graduates from a mid-Atlantic university attempted to assess the impact these changes have had on the way various health professionals view their professions (Lyons, Lapin, & Young, 2003). Those surveyed reported that there have been more negative than positive changes in health care, less job security, efficiency, increased workload, increased paperwork, and increased control of health care by insurance companies. Yet, even with these negative changes, nurses and allied health professionals reported a high level of satisfaction with their jobs. The most satisfying aspects of their jobs were reported as having a feeling of accomplishment from the job, opportunities for personal and professional growth, and recognition and satisfaction with job workload (Lyons, Lapin, & Young, 2003).

Since 2003, 95% of Western's medical assistant students' birth dates have been between 1966 and 1990 (Western Technical College, 2007). According to William Schroer's 2004 description of generations throughout the world, these students represent members of Generations X and Y, which are replacing the retiring baby boomers in the workplace very quickly. While the terms to describe the generations are not well defined, depending on who is using the term, these cue words or phrases for subcomponents of society demarcated by age have been useful and used by demographers and society as a whole to discuss the current spectrum of population cohorts (Schroer, 2004). For Schroer's report, baby boomers included anyone born from 1946 to 1965, Generation X (Xers) included anyone born from 1966 to 1976, and Generation Y (Yers) included anyone born from 1977 to 1994.

For years the baby boomers' preferences and beliefs have dominated the workplace, but that has changed and will continue to change at a very fast rate. The U.S. Bureau of Labor Statistics predicts that 22 million workers aged 45 years or older will leave the work force by the end of 2008, mostly due to retirement. With the exodus of baby boomers, employers have looked to Generations X and Y to fill the void. Employers have found that these employees have different expectations for job satisfaction. In the past, offering increasing compensation was considered the most effective solution for retaining valued staff, but that is no longer true. Today's workers are showing more interest in careers that help to support work-life balance and continued career growth (Domeyer, 2007).

According to Bruce Tulgan of Rainmaker Thinking, a management-consulting firm in New Haven, Connecticut, Xers and Yers began to outnumber the baby boomer employees

in 2005 (Dolezalek, 2007). Dolezalek described both Xers and Yers as comfortable with technology as Internet and the Xers grew up together, and the Yers have always had it and can't imagine life without it. Both generations have witnessed the collapse of big businesses, massive corporate lay-offs and disintegrating stock returns after the recession of the late 1980's and early 1990's. Both generations are known for changing jobs and careers far more frequently than past generations and for taking a cynical, or at least self-centered, view of work in general. Both Xers and Yers have taken the attitude that the way to maintain security is not through a job that lasts, but with a resume that is strong. They have learned to prepare themselves for the next job because they know their current job could become their former job at any time (Dolezalek, 2007).

These two generations have shown a similar tendency to resume-build and to move on when they feel stalled or unable to get new experience at their current job. Xers and Yers are more interested in work-life balance than their baby boomer predecessors. Tulgan noted that while Xers may want status, authority, prestige, and rewards, they are also willing to take lateral moves within an organization. A move up may represent more money but, if associated with less varied experience, it may represent less security while a lateral move may make them more marketable and employable in the long run. Both generations have shown they are willing to leave uninspiring employment even if the money is good (Dolezalek, 2007).

After Graduation

Coinciding with information reviewed on career satisfaction in the United States, a recruitment study of post-secondary institutions across Canada in 2006 revealed the top

attribute young people valued most when considering fulltime employment after graduation was opportunity for advancement, followed by having good people to work with, good managers to report to, and work-life balance. Initial salary ranked only ninth on the wish list, which was down two spots from a similar survey in 2004 (Pooley, 2006).

Follow-up studies of graduates from several two-year community colleges and four-year colleges in the United States were reviewed. The 2001 graduates of the Community College of Philadelphia experienced positive career outcomes according to their college research office report (Philadelphia Community College, 2002). Those employed in new jobs shortly after graduation totaled 58%. The college career graduates working in jobs that were related to their programs of study totaled 68% and Allied Health program graduates earned the highest salaries. The 2002 community college graduates of College of the Canyons' RN and LPN program indicated that 100% were employed in nursing and 70% planned to further their education by enrolling in a degree program on a part time basis (College of the Canyons, 2003).

Wisconsin Technical College System gathers graduate follow-up survey data annually for a state report for each program offered in the state. According to the survey report on the 2007 graduates, 90% of the 350 responding medical assistant graduates were employed shortly after graduation with 88% of those employed in a medical assistant related field. Of the 33 respondents not employed, 22 were continuing their education (Wisconsin Technical College System, 2007).

In summary, the population of individuals over the age of 65 will continue to increase over the next 20 to 30 years. The need for health care for this increased number of people

will continue to rise as will the need for workers to replace the retiring employees. Cost containment continues to play a major role as health care facilities attempt to meet these needs in outpatient facilities, such as medical clinics, and not with expensive hospital care. Medical assistants are multi-skilled to meet the administrative and clinical requirements of a medical clinic. The job outlook for medical assistants and nurses will continue to be strong for the next 20 to 30 years as the number of aging Americans continues to increase. More nurses are leaving the career than are currently entering. Medical assistants have observed and worked with a variety of medical staff, have seen the potential for increased salary and the opportunity to advance their skills and resumes, and perhaps have learned about financial incentives to return to school for advanced degrees. Today, more workers than ever are pursuing varied career paths that reflect career changes with one building upon the other. "These ongoing changes in career plans, directions, and employers portray the lifetime progression of work as a total picture of experiences" (Brown B. , 2001). Graduate satisfaction with current career, plans to advance, and desire for information that may assist in obtaining advanced degrees were questions for Western.

Chapter III

Methodology

This chapter will deal with how the subjects were selected, details about the instrument used to collect the data, and data analysis. The conclusion of the chapter will consist of limitations the methodology possibly encountered during the study.

Description of Research Method

The quantitative methodology used to gather data about the 2003 to 2007 graduates from Western's Medical Assistant Program was a survey. Quantitative data collection is a method of numerical descriptions for trends, attitudes or opinions of a population by studying a sample of that population (Creswell, 2008). A survey was developed by the researcher to gather opinions on career satisfaction, plans to change careers, and satisfaction with availability of associate courses in a diploma program. Additionally, the demographics sought to identify how age or nationality might influence satisfaction levels and career change plans.

Subject Selection

The participants in this study were adults who graduated from Western's Medical Assistant Program between 2003 and 2007. The survey was directed towards graduates who had taken online courses in the Medical Assistant Program and this first occurred in 2003. About that same time more of the enrollment and orientation information for students was moved online with fewer face-to-face conversations between potential students, faculty, and advisors. The opportunity for spontaneous and specific questions from students to faculty or advisors was no longer readily available. Class rosters were researched and it

was determined that there were 138 graduates during this time. Mailing addresses were obtained from Western's Alumni Office for all 138 graduates.

Survey Instrument

The survey used to gather data was constructed based on the research objectives outlined in Table 1.

Table 1

Research Objectives Addressed in Survey

Research Objectives	Survey Item
1. Determine medical assistant career satisfaction for Western Medical Assistant Program graduates from 2003-2007.	1-3
2. Determine medical assistant graduate plans for career continuance or career change.	4-11
3. Determine the level of importance to the graduates of having the option of taking associate level courses in place of diploma courses while in the Medical Assistant Program.	12-13
4. Identify any differences in career satisfaction, career plans and importance of career options in different graduates' age and nationalities.	14-16

The survey was designed to obtain honest and voluntary responses from the participants in a confidential manner. The survey was printed on one side of two sheets of paper (see Appendix A). The cover letter requested opinions and information, assured confidentiality, described the relevance of the study, addressed the method of returning the completed survey, stated the due date, and included a thank you from the investigator. The cover letter was printed on Western Technical College letterhead (see Appendix B).

The 17 survey questions consisted of basic yes and no, closed-ended, four-option Likert scale, and open-ended questions. The survey instrument was designed to be completed within five to 10 minutes.

Survey items 1 through 3 were designed to determine how many graduates were currently employed as medical assistants or in health care, and how many were satisfied with their career choice of medical assistant. The data from these questions could be used to determine how many graduates remain employed in health care and specifically as medical assistants.

Survey items 4 through 11 were designed to determine plans for career continuation or career change. Survey item 4 was designed as a four-option Likert scale item, while survey item 5 was designed as an open-ended question to determine what career choice a graduate might be considering. Survey items 6 through 11 were designed to determine if additional health related courses or programs were being considered, had been started, or had been completed since graduating from the Medical Assistant Program. The even number survey items of 6, 8, and 10 asked for a response of yes or no. If the answer was yes, the following odd numbered survey items of 7, 9, and 11 asked an open-ended question concerning the

courses, programs, or schools involved. The data from these questions could be used to determine how many graduates use medical assistant career as a first step toward other health care careers. This data could also help determine what careers MA graduates are considering and how many graduates have returned or plan to return to Western to further their careers.

Survey items 12 and 13 were designed to provide input regarding the information received by the graduates prior to starting the MA program on the availability of Associate courses in a Diploma program. Both survey items were four-option Likert scale items. This data could influence the type and manner of presentation of information on Associate level course availability for MA enrolling students.

Survey items 14 through 16 were designed to provide demographic information about the student's age, year of graduation, and nationality. This data could help provide action plans in response to certain ages or nationalities of students with career dissatisfaction after graduation or lack of employment in a health related occupation. Survey item 17 was an open-ended question asking if there was any additional information the respondent wished to share with the researcher.

No measures of validity or reliability were conducted on the survey developed by the researcher. Susan Greene, UW-Stout Research and Statistical Consultant, reviewed the survey for reliability and to assure that the survey instrument was organized in such a way to be respondent friendly yet provide desired data. A draft of the survey was sent to the research advisor and changes were suggested by both reviewers. The survey instrument was submitted and approved by the University of Wisconsin-Stout's Human Subject

Institutional Review Board (IRB), as well as by the Policy and Legislative Team at Western Technical College. No pilot study was conducted.

Data Collection

The survey and cover letter were mailed to 138 Medical Assistant graduates who completed the program between 2003 and 2007. A self-addressed, stamped envelope with return service requested was included with the survey and letter to make the process as easy as possible for the respondents. The surveys were mailed on July 15, 2008 and respondents were asked to complete and return the survey by July 31, 2008, providing them 14 days to complete the survey. No follow up on unreturned surveys was conducted.

Data Analysis

Data from the returned surveys was tallied in an Excel spreadsheet and an analysis was conducted by the use of the Statistical Package for Social Sciences (SPSS) software. The data was nominal and ordinal in nature with all appropriate descriptive statistics and frequency distributions conducted on the data gathered from the survey. Responses to the survey questions were analyzed in the following ways:

1. Frequency of responses and percentages were tabulated for those questions where it was appropriate.
2. Crosstabs, chi-square, and t-test for determinations of any differences in career satisfaction, career plans and career options in regards to age groups and nationalities. All statistical testing used a significance level of 0.05 and used two-sided tests.

Limitations

There were several limitations to this study. The survey instrument developed by the researcher may have contained errors, leading questions, or omissions that were not intended. Survey questions related to continuing education or career change may have influenced the responses. The survey may not have reached the intended person. Responses to the survey represent the opinions and attitudes of the participating graduates of Western's Medical Assistant Program at this time. These findings may differ significantly with future surveys.

Chapter IV

Results

Overview

The purpose of the study was to determine the career satisfaction and continued education plans for the 2003 through 2007 Medical Assistant Program graduates of Western Technical College. The study also intended to determine if the availability of Associate level courses, or the information about the availability of such courses, would have been of interest to these graduates while they were students in the program. Results of this study will be reviewed in this chapter. Data and information found in this study were analyzed in accordance with the research objectives as stated in Chapter 1. First to be discussed are the demographics of the graduates who responded to the survey.

Demographics

Medical Assistant Program graduates were identified through past graduate records for the years 2003 through 2007, and mailing addresses were obtained from the Alumni Association at Western. A total of 138 surveys were mailed and 53 completed surveys were returned for a response rate of 38%.

Items 14 through 16 on the survey were used to describe the demographics of the respondents. The majority of graduates who participated in this study were 18 to 29 years of age, making up 67.9% of the total (see Table 2). The sex of the graduates was not asked as the program had only two male graduates during this period, and responses to certain questions might have indicated the identity of the respondent to the researcher. Responses to items 14 through 16 are indicated in Table 2 through Table 4.

Table 2

<i>Age</i>	Number	Percent
18-29	36	67.9
30-39	10	18.9
40-49	5	9.4
Over 50	2	3.8
Total	53	100.0

Table 3

<i>Graduation Year</i>	Number	Percent
2003	8	15.1
2004	11	20.8
2005	13	24.5
2006	14	26.4
2007	7	13.2
Total	53	100.0

The greatest number of responses, as seen in Table 3, came from those that graduated between 2004 and 2006 with over 20% for each of those years and a combined total of 72% of the sample.

Table 4

Race

	Number	Percent
American Indian or Alaskan Native	1	1.9
Asian or Pacific	2	3.8
White	50	94.3
Total	53	100.0

Data Analysis

Survey items 1 through 3 were to determine the graduates' satisfaction with the medical assistant career. Responses are indicated in Tables 5 through 7.

Table 5

Currently employed as MA?

	Number	Percent
Yes	44	83.0
No	9	17.0
Total	53	100.0

Table 6

Current employment status

	Number	Percent
No employed	2	3.8
Employed, not in health care	2	3.8
Employed in health care	49	92.5
Total		100.0

Table 7

Satisfaction with Career Choice of MA

	Number	Percent
Very Unsatisfied	0	0
Unsatisfied	3	5.7
Satisfied	21	39.6
Very satisfied	28	52.8
Total	52	98.1
Missing	1	1.9
Total	53	100.0

Tables 5 through 7 demonstrate the responses to survey items 1 through 3. These responses indicated that 92.5% of the graduates are employed in health care with 83% of the graduates employed as medical assistants. The responses also indicated that a total of

94.2% of the graduates are either satisfied or very satisfied with the career choice of medical assistant. The calculation of the mean is the average of the responses for the individual survey items. The calculation of standard deviation describes the distance away from the mean, so a smaller number is more desirable as a sign of validity. The mean and standard deviation were used to analyze the data from all Likert survey items. The mean for survey item three in Table 7 is 3.48 with a standard deviation of 0.610.

Survey items 4 through 11 were to determine how many graduates had considered a career continuance or a career change. Survey item 4 was presented as a four-part Likert item with results in Table 8.

Table 8

Considered Career Change

	Number	Percent
Strongly disagree	12	22.6
Disagree	11	20.8
Agree	20	37.7
Strongly Agree	9	17.0
Total	52	98.1
Missing	1	1.9
Total	53	100.0

The mean for survey item 4 was 2.50 with a standard deviation of 1.038. From Table 8, it can be seen that 43.4% of the respondents replied negatively to having considered a

career change, while 54.7% responded positively to having considered a career change. The mean and the standard deviation also indicated that the responses here are fairly evenly divided between those considering a career change and those not considering such a change.

Survey item 5 was to determine what careers graduates might have considered. The responses to survey item 5 are displayed in Table 9.

Table 9

Careers Considered

	Number	Percent
No response	16	30.2
Chemical Dependency Counselor	1	1.9
Coding Specialist	1	1.9
Dispatcher	1	1.9
LPN or RN	2	3.8
Management	1	1.9
Massage Therapist	1	1.9
N/A	1	1.9
Radiography	1	1.9
RN	20	37.7
RN / Rad Tech	3	5.7
Social Worker	1	1.9
Surgical Tech	2	3.8
Ultrasound or ENDT	1	1.9
Vet Tech	1	1.9
Total	53	100.0

Review of this data indicates that 64.2% of the respondents identified a health related career as a career continuance or change possibility. Social Worker, Management, and Chemical Dependency Counselor were not counted by this researcher as specifically health related, and 16 graduates did not respond to this survey item. Responses to survey item 5 were compared to survey item 4 in which graduates were asked about the consideration given to career change. The data comparing career satisfaction to careers considered is displayed in Table 10.

Table 10

Considered Change and Career Choice for Change

Considered Change	Career	Number	Percent
No response to survey item 4	RN	1	100.0
Strongly Disagree	No Response	9	75.0
	Dispatcher	1	8.3
	N/A	1	8.3
	RN	1	8.3
	Total	12	100.00
Disagree	No Response	7	63.6
	RN	4	36.4
	Total	11	100.0
Agree	Chemical Dependency Counselor	1	5.0
	Coding Specialist	1	5.0
	LPN or RN	1	5.0
	Management	1	5.0
	Massage Therapist	1	5.0
	RN	7	35.0
	RN/Rad Tech	3	15.0
	Social Worker	1	5.0
	Surgical Tech	2	10.0
	Ultrasound or ENDT	1	5.0
	Vet Tech	1	5.0
	Total	20	100.0
	Strongly Agree	LPN	1
Radiography		1	11.1
RN		7	77.8
Total		9	100.0

Table 10 shows that all graduates who answered positively to considering career continuance or career change have given thought to a specific career. Of the 23 who responded negatively to the career change statement, 16 or 69.6% verified this by giving no specific career choice as a consideration.

Survey item 6 was to determine the number of graduates that plan to take health care related courses within the next year. Twenty-seven or 51.9%, of those responding stated they do plan to take health related courses within the next year with 25 (48.1%) stating that they do not. One graduate did not answer this item.

Survey item 7 was used to determine the health program choices for respondents that indicated they were planning to take health courses in the next year. The results are displayed in Table 11.

Table 11

Program Choice Planned within One Year

	Frequency	Percent
No Answer	27	50.9
A&P	1	1.9
Certified NA	1	1.9
Coding Specialist	1	1.9
Counseling	1	1.9
EMT Basic	2	3.8
LPN	1	1.9
LPN / RN	1	1.9
LPN or RN	1	1.9
Radiography	1	1.9
RN	13	24.5
RN or MRI Tech	1	1.9
Surgical Tech	1	1.9
Ultrasound	1	1.9
Total	53	100.0

Seventeen (65.4%) of the 26 respondents that identified a health related program they planned on attending in the next 12 months, responded with LPN or RN as a choice. Nine (69.2%) of the 13 programs identified are Associate level programs.

The second part of item 7 was to determine what school the respondents who were considering a health related program planned to attend. Results are shown in Table 12.

Table 12

School Identified for Career Continuation

School	Frequency	Percent
Did not answer	26	49.1
Argosy University	1	1.9
Cities	1	1.9
MATC	2	3.8
MATC or WTC	1	1.9
Viterbo	1	1.9
Winona SE Tech	3	5.7
WTC	16	30.2
WTC or Viterbo	1	1.9
WTC or NWTC	1	1.9
Total	53	100.0

Table 12 indicates that 27 graduates identified a school choice for career continuation education and 16 (59%) of the respondents plan to attend Western Technical College to further their education in a health related career. At the time of this study, Western offered all health related programs listed in Table 10 with the exception of Veterinary Technician (Vet Tech).

Item 8 was employed to determine how many of the graduates that responded have already taken health related courses. All 53 participants responded to this question and 15 (28.3%) indicated they have taken health related courses, with the other 38 (71.7%) responding that they have not taken additional health related courses since graduating from the Medical Assistant Program.

Item 9 was to determine what program and what school those who have taken additional health related courses chose. The programs are identified in Table 13 and the schools are identified in Table 14.

Table 13

Programs with Courses Taken

	Frequency	Percent
No answer	39	73.6
Certified Nursing Assistant	2	3.8
COCHO & MRDA	1	1.9
Drug Screen Tech	1	1.9
EMT Basic	1	1.9
General Ed	1	1.9
LPN	2	3.8
RN	4	7.6
Rad Tech / Radiography	2	3.8
Total	53	100.0

Table 13 shows that 14 (26.4%) of the 53 respondents have taken additional health related courses. Six of the 14 respondents indicated they had taken courses in the LPN or RN programs.

Table 14

Previously Taken Courses—School

	Frequency	Percent
No answer	38	71.7
Gundersen Clinic	1	1.9
MATC	1	1.9
MN State College	1	1.9
Winona Tech	3	5.6
Western	7	13.2
Western & Winona Tech	1	1.9
Western / NWTC	1	1.9
Total	53	100.0

Table 14 shows that for the 15 respondents that indicated previously taken health related courses, nine (60%) identified Western Technical College as the school where these courses were taken.

Cross tabulation of those who plan to take additional health related courses to those that have already taken such courses is shown in Table 15.

Table 15

Cross Tabulation: Plan to Take Courses vs. Have Taken Courses

		Have taken additional health related courses?		Total
		Yes	No	Yes
Plan to take health care related courses?	Yes	12	15	27
	No	3	22	25
Total		15	37	52

Of the 15 respondents that have already taken a health related course since graduation, 12 were planning on taking more courses (80%). Of the 37 who had not taken a health related course since graduation, 15 responded that they plan on taking one (41%). One survey respondent did not answer the two necessary items to complete this cross tabulation.

Items 10 and 11 were to determine how many of the respondents have graduated from another health related program since completing the MA Program, and what programs and schools they chose. Data indicates that five respondents have graduated from another health related program although Table 16 indicates that one of these five did not indicate the program or the school.

Table 16

Graduated from another Program

	Frequency	Percent
No response	49	92.5
Certified Nursing Assistant	2	3.8
EMT Basic	1	1.9
LPN	1	1.9
Total	53	100.0

Data showed all four respondents that indicated graduation from a program, had attended and graduated from the program at Western Technical College.

Item 12 was to determine if the respondents received information on Associate level courses that could be taken while enrolled in the MA Program for future ease of transferability into an Associate level program. Data indicated that 45 (84.9%) of the 53 respondents answered negatively to item 12 in that they either did not receive information about the availability of Associate level courses or did not recall such information. The remaining 15.1% indicated that they had received the information in time.

Item 13 had three parts which were to determine the level of importance to the respondents in having the ability to take three specific Associate level courses while in the MA Program in place of three Diploma courses. The responses to these three courses referred to in item 13 are shown in Tables 17 through 19.

Table 17

Substitute – Microsoft Office for Diploma Course

	Frequency	Valid percent
Definitely would not	1	2.0
Probably would not	11	21.6
Probably would	19	37.3
Definitely would	20	39.2
Total	51	100.0
No response	2	
Total	53	

Table 17 shows that of those responding to the question of how likely the respondents would have substituted Microsoft Office for two credits at the Associate level in place of Computer Basics for two credits at the Diploma level, 39 (76.5%) of the respondents to this item answered positively to substituting the Associate level office computer course for the Diploma level course.

Table 18

Substitute – Oral and Written Communication for Diploma Courses

	Frequency	Valid Percent
Definitely would not	2	3.9
Probably would not	15	29.4
Probably would	16	31.4
Definitely would	18	35.3
Total	51	100.0
No Response	2	
	53	

Those responding to the question of how likely the respondents would have substituted Oral Communication and Written Communication for five credits at the Associate level in place of Allied Health Communication for two credits at the Diploma level indicated two-thirds answered positively to substituting the Associate level communication courses for the Diploma level course as indicated in Table 18.

Table 19

Substitute - Anatomy & Physiology Courses for Diploma Course

	Frequency	Valid Percent
Definitely would not	4	7.8
Probably would not	7	13.7
Probably would	17	33.3
Definitely would	23	45.1
Total	51	100.0
No Response	2	
	53	

Table 19 shows that those responding to the question of how likely the respondents would have substituted General and Advanced Anatomy and Physiology for eight credits at the Associate level in place of Human Body in Health and Disease for three credits at the Diploma level, indicate that 40 or 80.4% answered positively to substituting the Associate level Anatomy and Physiology course for the Diploma level course.

Statistics for the three courses for possible substitution are shown together in Table 20.

Table 20

Statistics for Substitution of Associate Level Courses

Number	Valid	Substitute -	Substitute -	Substitute -
		Office	Communications	Anatomy & Physiology
		51	51	51
	Missing	2	2	2
Mean		3.14	2.98	3.16
Median		3.00	3.00	3.00
Std. Deviation		.825	.905	.946

Table 20 indicates a median of 3 for the three course substitutions with a standard deviation of less than 1.

Objective 4 of this study was to identify any differences that age groups or nationalities had in career satisfaction, career plans and importance of career options. With only three respondents of a nationality other than Caucasian, there was insufficient diversity in the sample to test by nationality. Insufficient diversity also existed in the age divisions in question 14 so a new age variable was created. The new age variable was a dichotomous, with respondents placed in one of two groups, those aged 18 to 29 years old and aged 30+ years old. Statistical testing was then performed on the new age variables.

The relationship between age and career satisfaction was explored using an independent samples t-test to test if the average scores for satisfaction with career choice differed between the two age groups. The average satisfaction rating of the younger age group

(MI = 3.40, SD = 0.60) was lower than the older group (MI = 3.65, SD = 0.61). However, results of the statistical testing indicated that this difference was not statistically significant ($t(50) = -1.38, p = .17$).

Career plans and age groups were compared using independent samples t-test. The computed significance value was determined to be 0.482, which is greater than 0.05 and therefore indicated no statistically significant differences in the average ratings between age groups and career plans.

Plans to take health care related courses and age groups were compared using cross tabulations and chi square. The computed significance value of 0.488 is greater than 0.05 and therefore indicated no statistically significant relationship between age and plans to take health care related courses.

Having taken additional health related courses and age groups were compared using cross tabulations and chi square. The computed significance value of 0.596 is greater than 0.05 and therefore indicated no statistically significant relationship between age and having taken additional health related courses.

Having graduated from another health related program and age groups were compared using cross tabulations and chi square. Because of the small number of people that responded "yes" to having graduated from another program, the Fishers Exact Test was used. The two-sided significance value was determined to be 0.32, which is less than 0.05 so it was concluded that there was a relationship between age and having graduated from another program. Review of the crosstabs indicated that four out of 17 students 30 years or

older graduated from another program compared to one out of 36 students in the 18 to 29 age group.

Item 17 was an open-ended question asking if there was any additional information the respondent wished to share with the researcher. While positive comments about Western's Medical Assistant Program were made, the comments seem to offer no relevant information to this study.

Chapter V

Summary, Conclusions and Recommendations

This chapter is divided into summary of the study, the conclusions based upon the findings of the study and recommendations based on the study. In the conclusion each research objective will be restated and answered.

Summary

This study was a follow-up study of 2003 through 2007 Western medical assistant graduates. Literature review indicated that job placement and job outlook has remained strong and continues to look strong for medical assistants in Wisconsin, as well as the nation although salaries are low when compared to other health careers. The literature review also indicated that the salaries for registered nurses are twice as high as the salaries of medical assistants in Wisconsin as well as nationwide. Therefore, Medical Assistant career satisfaction and interest in career change was of interest to this researcher. The years 2003 through 2007 were selected because significant changes to the curriculum were made in 2003. At that time the program curriculum became a state curriculum with all 16 technical colleges in Wisconsin following the same program structure including the same course titles, numbers and content. Also at this time, online courses were introduced into Western's Medical Assistant Program which resulted in less time on campus and more options to take courses that would be accepted by both Diploma and Associate level health programs and would transfer statewide. This study was designed to identify medical assistant graduates' interest in changing careers and in continuing education in health related courses and programs.

The Medical Assistant Program, like all health programs at Western, has orientation information on line for potential students. This information, along with information that may be obtained from the admission counselors over the telephone or in person, comprises the total amount of information received by incoming students. This study was designed to determine if graduates had received information about the ability to substitute Associate level course for Diploma level courses in the Medical Assistant Program. If not, a need exists to review or revise the method of educating potential students about the availability of Associate level courses that could be substituted and would then provide credits that could transfer into an Associate level program at a later date.

Conclusions

Four research objectives were addressed in this study. Each objective will be reviewed with conclusions made for each.

Research Objective #1. Determine medical assistant career satisfaction for Western Medical Assistant Program graduates from 2003 through 2007. Survey items 1 through 3 addressed this objective. Results indicated positive attitudes regarding career satisfaction as well as employment in health care and as medical assistants. Of the 52 respondents to the career satisfaction question, 49 (94%) were either satisfied or very satisfied. Of the 53 respondents to the employment questions, 49 (94%) were employed in health care and 44 (83%) were employed as medical assistants.

Research Objective #2. Determine medical assistant graduate plans for career continuance or career change. Survey items four through 11 addressed this objective. Survey item number 4 was a Likert survey item with four options. Of the 52 respondents to

this item, 29 (56%) responded that they agreed or strongly agreed with the statement on consideration of a career change. Twenty-three (44%) of the respondents disagreed or strongly disagreed with the career change statement. This close percentage indicated that slightly over one-half of these graduates considered continuing education in a health related career after graduation from the Medical Assistant Program.

While 29 of the 53 respondents answered positively to consideration of career change or continuation in item 4, 37 (70%) responded to item 5 by indicating a specific career consideration and 34 (64%) identified a specific health related career. Of the 34 respondents identifying health careers, 25 (73%) identified LPN or RN.

Item 6 indicated that 52% of the 52 respondents indicated that they plan to take a health related course within the next year. Item 7 indicated that of the graduates who planned to begin a program within one year, nine (69%) of the 13 programs identified were Associate level programs. Of the 27 graduates who responded that they planned to return to school within one year, the LPN and RN programs were identified by 17 (63%) of these respondents. Eighteen of the 27 respondents (67%) identified Western Technical College as their choice of school.

Item 8 indicated that 15 (28.3%) of the 53 respondents have already taken health related courses since graduation. Item 9 indicated that 13 (24.5%) of the 53 respondents identified a health program related to the courses they took and eight (61.5%) of the 13 indicated they had taken courses in Associate level programs. Six of the eight indicated they had taken courses in the LPN or Nursing programs. Item 9 also indicated that of the 15 respondents identifying the school from which they took these courses, nine (60%) identified Western.

Continuing education was further indicated by the cross tabulation done of those who plan to take additional health related courses to those who have taken health related courses. Of the 15 respondents that have already taken a health related course since graduation, 12 were planning on taking more courses (80%). Of the 37 who had not taken a health related course since graduation, 15 responded that they plan on taking one (41%). Items 10 and 11 indicated that four of the 53 respondents had graduated from another program and all four had graduated from a health program at Western.

Items 4 through 11 suggested a strong interest in continuing health care education for these medical assistant graduates, especially in Associate level course with the most interest in the LPN and Nursing programs. Western Technical College was identified as the school of choice for continuing education after graduation.

Research Objective #3. Determine the level of importance to the graduates of having the option of taking associate level courses in place of diploma courses while in the medical assistant program. Survey items 12 and 13 addressed this objective. Responses to item 12 indicated that 45 (84.9%) of the 53 respondents responded that they either did not receive information about the availability of associate level courses or that they did not recall receiving this information.

The first part of item 13 indicated the importance to the respondents of having the option of taking Microsoft Office for two Associate level credits in place of the two credit Computer Basics course at the Diploma level. A majority, 39 (76.5%) of the 51 respondents to this item responded positively to this option. The second part of item 13 indicated the importance to the respondents of having the option of taking two Associate

level courses, Oral and Written Communication for two credits each, in place of the one Diploma level course of Allied Health Communication for 2 credits. Of the 51 respondents to this item 34 (66%) responded positively to this option. The third part of item 13 indicated the importance to the respondents of having the option of taking two Associate level courses, General and Advanced Anatomy and Physiology at four credits each, in place of the Diploma level course of Human Body in Health and Disease for three credits. Of the 51 respondents to this item 40 (78.4%) responded positively to this option. Data reviewed suggested a strong interest in knowing about and having the option to substitute these Associate level courses for the Diploma courses in the Medical Assistant Program.

Research Objective #4. Identify any differences in career satisfaction, career plans and importance of career options in different graduates' age groups and nationalities. Survey items 14 through 16 addressed this objective. A different age variable had to be created as there was insufficient diversity in the age divisions identified in survey item 14. The new age variable of those aged 18 to 29 years old and 30+ years old was created. Item 15 was for surveyor interest to determine how many from each graduation year responded to the survey. Graduation years of 2003 through 2005 each had more than 20% of the responses with 2003 and 2007 graduation years having 15.1% and 13.2% respectively. This surveyor considered that equal distributions of responses were received from each group. Only three of the 53 respondents to item 16 indicated a nationality other than Caucasian, so there was insufficient diversity in the sample to test by ethnicity.

Data, as presented in Chapter 4, suggested no statistically significant findings to the comparisons of age to career satisfaction, age to career plans, age to plans to take health

related courses, or age to having taken additional health related courses. Data from the students 30 years or older indicated a higher percentage of this group graduated from another program than those of the 18 to 29 age group. No data was collected to explain this finding but perhaps age and the interest in salary increase as presented in the Literature Review of this paper can explain this slightly higher percentage.

In general, satisfaction with career and health care employment was indicated by the Western Medial Assistant Program graduates in this study. Interest in career continuation was also indicated with a strong interest in continuing health careers expressed. Interest in Associate level courses was indicated and more information on the availability of Associate level courses as substitutions for Diploma course was also indicated. A review of orientation information to potential students is recommended with information on Associate level course substitutions made available to these students.

Recommendations

1. Information about the availability of Associate level courses that could be substituted for Diploma level courses in Medical Assistant Program should be readily available to potential students. This information should be made available in sufficient time for students to give serious consideration to the possibility of continuing in a health career after the Medical Assistant Program. For those that begin the Medical Assistant Program with the intention of continuing to an Associate health program, this information is of utmost importance. To those who have not given health careers much thought beyond the one year Medical Assistant Program, this could initiate some long-term goals. Consideration should be given to

a face-to-face orientation session at least once a semester in the Medical Assistant Program to allow more thorough explanations of Diploma and Associate level programs and courses.

2. This study could be replicated every five years, without survey items 12 and 13, to identify career satisfaction and plans for continued health care courses and programs for medical assistant graduates. This information would be helpful for evaluation and planning purposes by the health career programs at Western.
3. Survey items 12 and 13 should be part of an annual follow-up survey to medical assistant graduates to determine the availability of information on Associate and Diploma courses and programs. These items should be added to a survey containing questions on the effectiveness of Western's Medical Assistant Program student orientation process.

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MEDICAL ASSISTANT GRADUATE FOLLOW-UP SURVEY

This study has been reviewed and approved by The University of Wisconsin-Stout's Institutional Review Board (IRB). The IRB has determined that this study meets the ethical obligations required by federal law and university policies. If you have any questions, concerns, or reports regarding your rights as a research subject, please contact Margaret Lentz, Investigator, 608-785-9922, lentzm@westernnc.edu or Dr. Howard Lee, Advisor 715-232-1251, leeh@uwstout.edu or IRB Administrator Sue Foxwell, Director, Research Services, 152 Vocational Rehabilitation Bldg. UW-Stout, Menomonie, WI 54751, 715-232-2477, foxwells@uwstout.edu. By completing the following survey you agree to participate in the project entitled, Medical Assistant Graduate Follow-Up Survey.

This research has been approved by the UW-Stout IRB as required by the Code of Federal Regulations Title 45 Part 46.

1. Are you currently employed as a Medical Assistant (MA)?

Yes

No

2. What is your current employment status?

- a. Not employed
- b. Employed, though not in health care
- c. Employed in health care
- d. Other (please specify)

3. How satisfied are you with your career choice of medical assistant?

Very Unsatisfied

Unsatisfied

Satisfied

Very Satisfied

The next set of questions asks you about your plans for career continuation or career change.

4. I have seriously considered changing my career.

Strongly Disagree

Disagree

Agree

Strongly Agree

5. I have seriously considered becoming _____

6. In the next 6 to 12 months are you planning to take additional health care related courses?

Yes

No

7. If yes, in what program(s)? _____

What school(s)? _____

8. Since you have graduated from Western's MA program, have you taken additional health related courses?

Yes

No

9. If yes, in what program(s)? _____

What school(s)? _____

10. Since you graduated from Western’s MA program, have you graduated from another health related program?

Yes No

11. If yes, in what program(s)? _____

What school(s)? _____

The next set of questions asks about your experiences during Western’s MA program.

12. Before enrolling in the MA Program, I received information about the availability of Associate level courses that could have been taken in place of some of the Diploma courses in the program.

No, I never received any information about the availability of Associate level courses.

I do not recall if I received any information about Associate level courses.

Yes, I received information but it was too late to be of any help.

Yes, I received information in time to be of help to me.

13. How likely would you have been to substitute these Associate’s level courses for the Diploma MA courses?

Substitution Options	Definitely Would Not	Probably Would Not	Probably Would	Definitely Would
a. Microsoft Office (2 cr) in place of Computer Basics (2 credits)				
b. Oral Communications (3 cr) <u>and</u> Written Communication (3 cr) in place of Allied Health Communication (2 credits)				
c. General Anatomy and Physiology (4 cr) <u>and</u> Advanced Anatomy and Physiology (4 cr) in place of Human Body in Health and Disease (3 credits)				

Please share a little about yourself.

14. I am _____ years old

18-29 30-39 40-49 Over 50

15. I graduated from the MA program at Western in

2003 2004 2005 2006 2007

16. I am predominantly _____ (Please mark only one group)

<input type="checkbox"/>	American Indian or Alaskan Native
<input type="checkbox"/>	Asian or Pacific Islander
<input type="checkbox"/>	Black, not of Hispanic Origin
<input type="checkbox"/>	Hispanic
<input type="checkbox"/>	White, not of Hispanic Origin
<input type="checkbox"/>	Other, please describe

17. Is there anything else you would like to tell me?

Please return this survey using the enclosed, stamped envelope.

Thank you for your participation!

Western Technical College

Date

Name
Address
City State Zip

Dear _____:

It is with a great deal of enthusiasm for medical assistants and the Medical Assistant (MA) Program at Western that I am writing to you about a study I am conducting and seeking your valuable input.

Description: As part of my Master's thesis, I am seeking information that can only come from graduates who have completed the program since online courses were first offered in the MA Program and the state curriculum was adopted. I am seeking information about your experiences since graduation as well as information about some of your experiences while you were a student in Western's MA Program.

The MA state curriculum is reviewed on a regular basis and the presence of Associate level courses is often discussed. Your input will be of great assistance to me in these discussions. Western is in the process of reviewing the student advising processes for all programs and your input will be important to me as possible revisions to the MA student advising process are considered.

Confidentiality: Your answers will be completely confidential and will be reported only as summaries. Your name will not be included on any documents and I do not believe you can be identified from any of this information.

Right to Withdraw: Your participation in this study is entirely voluntary. You may choose not to participate without any adverse consequences to you. However, should you choose to participate and later wish to withdraw from the study, there is no way to identify your anonymous document after it has been turned into me, the investigator.

Time Commitment: Please return the survey to me in the enclosed self-addressed, stamped envelope by July 31, 2008. This survey should take only 10 minutes of your time. The results of the survey will help assure that Western's MA Program continues to meet the needs of the students. Thank you very much for helping with this important study. If you would like to be notified about the results of this research, send an email to lentzm@westernnc.edu.

Sincerely,

Margy Lentz
Medical Assistant Program Director

Enclosures—survey and envelope