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Including Guidelines for the Development of a Two-Year Collegiate Curriculum for Medical Record Technicians.
Final Report.

State Univ. of New York, Alfred. Agricultural and Technical Coll.

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The objectives of the project were to determine the quantitative need of medical record technicians, to develop a curriculum, and to explore hospitals to be used for clinical experience. Five hundred and three hospitals assumed to be representative of the 7,127 listed by the American Hospital Association responded to a questionnaire. Projected data indicated that 18,304 persons were employed as medical record technicians and that by 1975 there would be a need for 9,810 more. The 2-year curriculum developed on the basis of the hospitals' suggestions consists of medical records science courses dealing with historical aspects, filing, classification systems and coding methods, ethical and legal aspects, specialized responsibilities, principles of organization and management, medical terminology, and machine transcription, general studies course including English, economics, American government, anatomy and physiology, psychology and human development, other required courses including data processing, computer program, typing, speech, and statistics, and 9 credit hours of electives. A simulated medical record room was developed and actual clinical experiences in large metropolitan and smaller local hospitals were arranged. The report also includes guidelines for curriculum development; the appendix includes survey results, course outlines, a sample hospital contract, a description of summer clinical experience, and a list of cooperating hospitals. (JK)

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IN THE AREA OF MEDICAL RECORDS TECHNICIAN**

February 1968

**U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE**

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Final Report

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A COMPREHENSIVE PROJECT TO DEVELOP A COMPLETE CURRICULUM
IN THE AREA OF MEDICAL RECORDS TECHNICIAN

Including Guidelines for the Development of a Two-Year Collegiate
Curriculum for Medical Record Technicians

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Alfred, New York

February, 1968

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U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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SUMMARY

In the light of recent indications of the great needs in the field of Medical Record Technology for qualified personnel and the dearth of accredited programs to educate and train persons for the field, this project was developed. The objectives of the project were (1) to carry out a nationwide study of needs in the field of Medical Record Technology; (2) to develop a curriculum for Medical Record Technicians; and (3) to explore possible hospitals to be used as part of an "extended campus." It was hoped that this broad spectrum approach to the problem would result in a set of guidelines which could be used by other two-year colleges in the development of similar programs regardless of their geographic location. Part of the problem associated with such a curriculum in the Health Technologies is the need for laboratory experiences in cooperating hospitals, whereby the students may receive practical experience under the supervision of qualified faculty and hospital personnel. Geographical location, therefore, becomes a problem. A college situated in a rural setting does not have the wealth of hospital resources upon which to draw for laboratory experiences. Therefore, it becomes necessary for the program to be developed in such a way that the students have these experiences incorporated into the program during a summer session or are transported to the clinical facilities during the regular school year.

The study of national needs incorporated the findings from 503 hospitals representing each of the fifty states of the United States. The findings indicate a projected need for an increase of 29% over present personnel. This represents 5,248 additional medical record technicians. By 1975 the need appears to be an increase of 54% or 9,810 additional personnel.

Associated with the question of personnel needs was the question of the course inclusions which would best prepare the graduates for maximum efficiency in the field. Results include the various courses specified and the percentage of hospitals indicating the inclusion of each course. Working from these data and the requirements of the college for general education courses, a curriculum was developed. The program includes a balance between the general education and technology areas. Course descriptions, course objectives, and course outlines were developed for each of the Medical Record Science courses. Furthermore, inasmuch as the need for students working with patient medical records is such an important part of the program, hospitals throughout the United States were requested to submit medical record forms and copies of actual patient medical records with identifying characteristics deleted. To provide a laboratory for the program, a simulated medical record room was developed which is 35' by 37' in size and is equipped with the various files, open files, typewriters, transcription machines, calculators, patient and address files, work tables, and desks similar to that which would be found in a hospital. This provides the opportunity for students to gain

the basic techniques and experiences necessary for productive work in a functioning hospital medical record department. This prepares the student without having them interfere with an active record department. Following this preparation they are ready for the summer experience in a cooperating hospital where they work with the rest of the personnel and are employed by the hospital. The summer affiliation program is directed by both the college faculty and the cooperating hospital record personnel. The summer experience is confined to a large metropolitan hospital with an excess of 10,000 annual patient discharges. In the senior year the students are transported to nearby smaller cooperating hospitals so they will be acquainted with the diversity of duties required of these personnel.

Guidelines have been developed and follow closely the format established by the Education and Registry Committee of the American Association of Medical Record Librarians entitled, GUIDELINES FOR THE DEVELOPMENT OF MEDICAL RECORD TECHNICIAN PROGRAMS IN JUNIOR COLLEGES.

Throughout the study, close cooperation was given by the American Association of Medical Record Librarians, the New York State Association of Medical Record Librarians, the Rochester Regional Health and Hospital Council, and many hospital medical record librarians.

INTRODUCTION

In the early 1960's, it became more and more apparent that the modern trends in scientific advances, coupled with the increasing population, dictated the need for a more thorough and competent means of technical education in the health professions. Nineteen hundred sixty-four was a noteworthy year for New York State inasmuch as this marked the first intensive examination of the health professions by a state-sponsored organization. The Community College Health Careers Project was inaugurated under the aegis of the Board of Regents of the University of the State of New York and was financed during its first phase by the W. K. Kellogg Foundation. The object of this project was to determine how best the two-year colleges could meet the training needs for increased health profession personnel. It had become apparent that, whereas most health technologies had had their educational program centered in hospitals, it was becoming less and less efficient due to the increasing demands on hospital facilities by the increased numbers of persons who were hospitalized for medical treatment. The two-year college with its diversified resources and teaching personnel, plus the fact that these colleges are widespread throughout the State and have available to them a multitude of clinical facilities, seemed to be the most likely educational institution to which the health professions should turn for this extended educational program.

The State University of New York Agricultural and Technical College at Alfred became involved in the Community College Health Careers Project, both in advisory and technical capacities. The college administration indicated to the Project that it would be interested in establishing a pilot program in the field of Medical Record Technology. At that time, there were four two-year colleges in the United States who were registered with the American Association of Medical Record Librarians as offering a two-year program in Medical Record Technology. In addition to these four two-year colleges, there were nine hospital-based programs of one-year duration which were admitting students. Therefore, the total number of programs available to interested persons in the United States numbered thirteen. Inasmuch as the need for medical record technicians seemed to be urgent, it was indeed evident that the number of programs available to prepare persons for this field was totally and markedly inadequate.

It was the feeling of the concerned personnel in the Health Technologies Division of this college that in order to establish a curriculum which would truly meet the needs of the profession, it would be necessary to approach the development of this curriculum from the point of view of the people in the field who truly know what the needs are. It was decided to seek assistance from hospital personnel throughout the United States as to the type of curriculum they felt would be most beneficial

in preparing people to act as medical record technicians. The plan was to obtain their counsel and to add this technical and practical approach to the basic educational needs that would be required to develop a well-rounded curriculum which would have a balance between the technical courses and general education courses.

METHODS

With this background in mind, this project was developed with three main objectives. First, to carry out a nationwide study of needs in the field of Medical Record Technology; second, to develop a curriculum for medical record technicians; and third, to explore possible hospitals to be used as part of an "extended campus." It was hoped that this type of broad spectrum approach to the problem might result in the development of a set of guidelines which could be used by other two-year colleges in the development of similar programs regardless of their location. One of the problems that exists with many two-year colleges is their geographical location with regard to hospital-clinical facilities. Inasmuch as the nearest large metropolitan hospital is seventy-five miles from the Village of Alfred and the college campus, it was felt that if a curriculum could be developed that would be functional, this would allow any college to develop a similar program without the lack of nearby clinical facilities being a deterring factor. This report will be given in terms of the three objectives stated above.

I. To Carry Out a Nationwide Study of Needs

The procedure planned was to survey hospitals throughout the United States to gain their reactions to a two-year medical record technician curriculum and to determine their anticipated employment needs in this area over the next five years. The survey was to be as follows:

- a) Not to exceed sixty hospitals in the states of Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Pennsylvania, Rhode Island, and Maryland.
- b) Ten hospitals each as a sample representation from each of the other forty-one states, excluding New York.
- c) Three hundred hospitals in New York.

The actual procedure carried out was as planned in parts b) and c); part a), the number of hospitals contacted for each state, was as follows:

Connecticut	64
Maine	41
Maryland	56
Massachusetts	60
New Hampshire	7
Pennsylvania	55
Rhode Island	25
Vermont	22

To each of the hospitals was sent a questionnaire (Appendix I) designed to gather data concerning present employment, future employment, salaries, hours of work, accreditation or licensing requirements, background of present medical record technicians as far as education is

concerned, the average length of retention of medical record technicians and the hospitals' suggestions as to college courses they felt would be desirable for medical record technicians. One thousand and sixty hospitals were contacted and of these, 503 responded to the inquiry. An analysis of the findings will be found in Appendix II. The analysis by control groups may be seen in Appendix VII. The hospitals responding are classified according to the control groups established by the Guide Issue of the Journal of the American Hospital Association listing of hospitals and are given below.

CLASSIFICATION CODES

Governmental, non-federal

- 12 - State
- 13 - County
- 14 - City
- 15 - City-county
- 16 - Hospital district

Proprietary

- 31 - Individual
- 32 - Partnership
- 33 - Corporation for profit

Voluntary, non-profit

- 21 - Church-related or operated
- 23 - Other non-profit

Governmental, federal

- 41 - Air Force
- 42 - Army
- 43 - Navy
- 44 - Public Health Service
- 45 - Veterans Administration
- 46 - Other federal

II. To Develop a Curriculum for Medical Record Technicians

A. Collegiate and Professional Association Involvement:

The procedure called for a visit to East Los Angeles College in Los Angeles, California, and St. Mary's Junior College in Minneapolis, Minnesota, where two of the then-existing medical record technician curriculums were in operation. The purpose was to discuss the programs with the directors of these curriculums and to seek their counsel in establishing guidelines which might be applicable to a program such as the one anticipated at this college. A further plan was to work with the Community College Health Careers Project of the New York State Department of Education and participate in their Teacher Training Program which was established at the State University of New York at Buffalo through the School of Health Related Professions. Furthermore, the plan was to attempt to complete the study and curriculum planning in time that the college would be able to initiate a pilot program for the Community College Health Careers Project and the State Education Department by September, 1967.

The principal investigator met with Mrs. Lea Tupper Davidson, R.R.L., Coordinator, Medical Record Technician Program, East Los Angeles College and with Miss Sandra E. Williams, R.R.L., Director, Medical Record Technician Program at St. Mary's Junior College. These people were extremely

helpful in the study, since they discussed the format they had followed for their curriculum development and also explained, in detail, the type of program that was being offered at their respective colleges. Subsequently, a meeting was held with Miss Laura Anne Biglow, R.R.L., Chief, Education Program, American Association of Medical Record Librarians in Chicago. At this time, the intent of the development of the curriculum on the Alfred campus was discussed and the format that was to be followed in the development of the curriculum was examined by Miss Biglow. Her contributions were most beneficial, since they included the necessary program requirements established by the American Association of Medical Record Librarians for eligibility for accreditation by the Association. The significance of such accreditation is that an institution is then eligible to have its graduates take the accreditation examination established by the Association. Successful completion of this examination by the graduate results in their becoming an Accredited Record Technician and they are eligible to add the initials, A.R.T., to their name as proof of their high qualifications.

In addition to the assistance gained by visits to the above-named institutions and organizations, the college worked closely with the Rochester Regional Health and Hospital Council, Inc. in Rochester, New York. Mrs. Helen T. Culian, R.R.L., a Medical Record Consultant for the Regional Council, was most helpful in guiding the curriculum development and the planning that took place.

B. College Faculty Involvement:

In order for an educational curriculum to be well founded, it is necessary that the faculty who will be involved in the teaching of the program be consulted in its development. As a result of the Teacher Training Program of the Community College Health Careers Project, we were able to enlist the services of Mrs. Eleanor McMurray who had been the Chief Medical Record Librarian at Glens Falls Hospital in Glens Falls, New York. She joined the faculty of the college in December and entered the Teacher Training Program at the State University of New York at Buffalo in January. As part of this program, she worked closely with the college Health Technologies Divisional Chairman and Medical Services Department Chairman in developing the actual curriculum for the new Medical Record Technology Program. Of invaluable assistance to her as a consultant was Mrs. Annette Unfried Buhsmer, R.R.L. Mrs. Buhsmer has had both considerable experience as a practicing Medical Record Librarian and as a teacher on the Alfred campus in the Business Division. Mrs. McMurray and Mrs. Buhsmer met regularly to determine the objectives for each of the Medical Record Science courses, as well as the course outlines and procedures that would be followed. The course objectives, descriptions, and outlines for the Medical Record Science courses will be found in Appendix III.

C. Advisory Committee Involvement:

Throughout the planning phases of the Project and the development of the course outlines, an Advisory Committee was consulted regularly.

This committee consisted of:

Mrs. Helen Cullan, R.R.L., Consultant
Rochester Regional Hospital Council
Rochester, New York

Sister Mary Rene, Administrator
St. James Mercy Hospital
Hornell, New York

Miss Carol Dodds, R.R.L., Head
Medical Record Department
St. James Mercy Hospital
Hornell, New York

Mr. Orlando Puozzoli, Administrator
Jones Memorial Hospital
Wellsville, New York

Mrs. Annette Buhsmer, R.R.L.
Wayland, New York

The Advisory Committee was kept informed of the procedures that were being followed and their advice was sought as to the most effective ways to implement the objectives of the study.

The guidelines, as established by the American Association of Medical Record Librarians, include the need for considerable clinical experience on the part of the students during their training program. A definite problem that is associated with the development of any curriculum that includes clinical or hospital experiences when the college is situated in a rural area is one of establishing a means whereby students can receive the type of training that would be possible where adequate clinical facilities are available. After reviewing the existing programs and consulting with the national association, it was decided that it would be best to plan a simulated Medical Record Department as part of the college laboratory. This has been designed and consists of a room 35' by 37' which is used as a laboratory for the Medical Record Science courses. The laboratory contains open shelf filing, drawer files, card index files, calculators, typing desks, secretarial desks, electric and manual typewriters, visible files, work tables, and other equipment. Inasmuch as it is necessary that students work with actual patient medical records, hospitals throughout the United States were contacted and asked to contribute copies of patient medical records and medical record forms. The names of the patients, attending physicians, nurses, and relatives were deleted from the records before being introduced into the laboratory. The present collection consists of approximately 2,500 patient medical records and are used by students for filing, statistical analyses, examination for completion and all other procedures involving such patient information. In addition to this

simulated laboratory providing a place for the students to work when there is a lack of adequate clinical facilities in the geographical area, it also provides a laboratory where they can learn the various procedures associated with their technology without involving the time and space of an active medical record department in a hospital. When examining existing medical record departments in both large and small hospitals, invariably one finds that the physical space is less than adequate for the daily functioning of the department and the addition of students into an already crowded set-up adds an unnecessary handicap to the hospital personnel. It was felt that it would be much more effective to have the students learn their basic procedures in the college laboratory and then to develop an "extended campus" which would consist of cooperating large metropolitan hospitals. Here the students would be in a full workaday environment and would be able to carry out the techniques they had learned on campus.

III. To Explore Possible Hospitals to be Used as Part of an "Extended Campus"

In light of the need for actual clinical experience on the part of medical record technicians, it was felt that after a period of learning which would take place in the college simulated medical record department laboratory, the students should have an opportunity to gain actual work experience in hospitals. It was determined that a program would be developed whereby the students would work in a hospital medical record department for a ten-week period between the first and second academic years of their collegiate program. The selection of hospitals that would be contacted in this program would be limited to those in the metropolitan areas of Buffalo, Rochester, Syracuse, and Binghamton, New York, and would be those which had in excess of 10,000 patient discharges annually. The rationale for this selection was that these are the geographical areas which would best meet the needs of the students with regard to their home locations and secondly, would also provide the extent of medical record department complexity which should give the student the best type of all-round experiences. When visiting the hospitals, the college prepared a contract for this summer affiliation which is included in Appendix IV. Within the contract, it is stipulated that the college will prepare the students for summer affiliation in such a way that they will be readily able to be of service to the hospital and ready to receive the additional instruction associated with this type of experience. A description of the summer affiliation can also be seen in Appendix V. Insofar as these provisions do not interfere with the normal functioning of the medical record department, the hospital agrees to provide experiences for the students in the following areas:

- A. Filing and handling requests.
- B. Admission procedures.
- C. Discharge analysis and statistics.
- D. Coding and indexing--sample research project, if possible.
- E. Transcription.
- D. Miscellaneous duties as needed for substitution for absentee employees.

It will be noted that this cooperative endeavor begun between the college and the hospital involves the actual hiring of the students by the hospital during this ten-week summer period. The monetary remuneration to be received by the students was agreed to be the New York State minimum wage in existence at the time of the cooperative program. The consensus of the hospital administrators and medical record librarians involved was that the type of preparation these students would have received prior to their employment would well qualify these students to receive a salary during their work experience. The feeling was that the salary should be at the existing state minimum wage, since this would place all hospitals in the position of having the same base salary and would not involve any competition between the hospitals for student selection. It was felt that there would be two main advantages to having the students employed at a salary during this summer period. The first would be that the students would then have a sense of "belonging" to the hospital staff and would give greater importance to the work which they were doing. This would take their experience out of the realm of role-playing and would provide them with a sense of responsibility that could not be achieved were this to be merely a clinical experience. The second factor that is important in establishing this type of relationship is that the students usually need to be employed during the summer to aid in the financial expense incurred in the regular college year. By providing opportunity for employment along with the learning experience, the student would not be financially jeopardized during this ten-week period.

The discussions with these metropolitan hospital personnel resulted in fifteen hospitals cooperating in this program and, at present time, contractual arrangements have been made with them for the summer of 1968. A list of the cooperating hospitals is given in Appendix VI.

Although the summer experience in metropolitan hospitals provides for a major phase of the hospital learning experience, it is necessary that the students be provided with an opportunity to acquire additional clinical experience during their senior year. Present plans include developing a cooperative program with six area hospitals whereby the students will participate in the following types of experiences: developing statistical reports; coding and indexing; handling research problems; medical abstracts and correspondence; and preparation of medical records for subpoena.

The six area hospitals are situated in communities other than Alfred, New York, and, therefore, the problem of transportation of students from the college to the clinical facilities would appear to be a problem. However, the college has provided a solution to the situation in that busses are utilized to transport students. The college owns and operates busses which are equipped with an elaborate sound system including individual headphone sets for each student and microphones for each four students. With this system the students and instructors are able to carry on discussions and prepare for the particular clinical experience of the day. On the return trip it is possible for the students to share

experiences and to discuss what has been learned and problems which have been encountered. The same audio system is used in the nursing program where the pre and post conferences are held on the bus. The system has been working well and should provide a supplementary service to the medical record program.

It is felt that the combination of the summer experiences in large metropolitan hospitals plus experience during the senior year in smaller local general hospitals will provide a well-rounded hospital experience in all phases of medical record practice.

IV. Development of Guidelines

It was hoped that this broad spectrum approach to the problems associated with the development of a medical record technician curriculum might result in the development of a set of guidelines which could be used by other two-year colleges for similar programs, regardless of their geographical location.

As a result of this study, the consensus is strong that, although we are interested in preparing students for careers in the field of Medical Record Technology, we must also take into consideration the fact that their total educational development must be included in the curriculum. Therefore, the recommendation is that a Medical Record Technician curriculum should be so designed as to meet the requirements for an Associate Degree and should be developed as a two-year collegiate program.

A program for Medical Record Technicians, in order to be practical and functional, should be developed in cooperation with the college and the local and national associations of Medical Record Librarians. With this in mind, we have worked closely with the American Association of Medical Record Librarians and the New York State Association of Medical Record Librarians and have sought their guidance and assistance throughout. The guidelines being presented follow very closely those prepared by the Education and Registration Committee of the American Association of Medical Record Librarians, ". . . for the development of the Medical Record Technician Programs in Junior Colleges." The major changes deal with the placing of the program on a collegiate campus as opposed to the program being developed as an affiliate program of a teaching hospital. The guidelines established are found in the Results and Findings of this report and begin on Page 13.

RESULTS AND FINDINGS

I. Needs

In the 1965 Guide Issue of the Journal of the American Hospital Association, 7,127 hospitals were listed. The 503 hospitals who responded to the questionnaire represented 7.06% of the hospitals in the United States. Since these were chosen at random, it is assumed that they are representative of the hospitals in the country. Projecting from these data, we find that presently there are 18,304 persons who are employed in the capacity of a medical record technician. Further projection indicates that by 1969, there will be need for an additional 5,248 medical record technicians, or an increase of 29% over present figures. By 1975, there will be a need for 9,810 additional medical record technicians, indicating an increase of 54%. These data merely re-emphasize the tremendous need indicated by medical record personnel in the field. One of the major concerns of the American Association of Medical Record Librarians, and also of various local medical record librarian organizations, is the lack of educational programs designed to prepare qualified medical record technicians.

II. Suggested Course Inclusions

As noted in the questionnaire, hospitals were asked to react to a variety of courses that were suggested for inclusion on a medical record technology curriculum. The result of these reactions is as follows:

<u>Course Title</u>	<u>Percent of Hospitals Suggesting Inclusion</u>
1. Filing	94%
2. Anatomy and Physiology	92%
3. Typing	85%
4. Business Law	85%
5. Medical Terminology	63%
6. Office Machines	62%
7. Mathematics	59%
8. Data Processing	48%
9. Accounting	43%
10. Manual Shorthand	37%
11. Machine Shorthand	15%
12. Machine Duplication	12%

These are specialty courses particularly related to the field and do not include those general education courses which would normally be included in a collegiate program such as English, Social Sciences, and Psychology.

III. Curriculum

Using the above data as supportive evidence and practical indications of the type of curriculum which would best meet the needs of the field, the principal investigator, along with the Chairman of the Medical Services Department and faculty person who would be directing this new curriculum, developed a curriculum which is based on the Guidelines established and which meets the requirements of the State University of New York with regard to General Education. The curriculum is shown in the Guidelines on Pages 17 and 18 in terms of the overall description and in terms of a quarter by quarter display. Although the curriculum is new and being tested for the first time this year, the sequence of courses seems to be well developed and logical.

IV. Guidelines for the Development of a Two-Year Collegiate Curriculum for Medical Record Technicians

A. Definitions

1. Credit Hour--Three hours of student time involvement per week. This may consist of one hour of lecture and two hours of preparation; a three-hour laboratory with no outside preparation time, or a two-hour laboratory and one hour of lecture, or the combinations of lecture, laboratory, and preparation amounting to three hours of time. It should be realized that the three-hour time involvement might well vary with the abilities of different individuals.

A credit hour for the work-study phase of the curriculum is defined as being equivalent to approximately 60 hours of supervised work-study experience in a cooperating hospital.

2. Laboratory Experience--The learning experience carried on in the laboratory either on the college campus or at the clinical facilities. By laboratory, this would refer to a collegiate laboratory in any of the sciences; learning experiences carried on in a simulated medical record room on campus; or learning experiences conducted in a medical record department or any of its branches in a hospital. This includes that phase of a program which has often been referred to as directed practice.
3. Work-Study Experience--That learning experience carried on in the hospital when the student is employed by said hospital and would usually take place during a summer session between the first and second years of the Medical Record Technician Program.
4. Cooperating Hospitals--Those hospitals which have been selected to participate in the Medical Record Technology Program and who have indicated the desire to cooperate with the program for this type of instruction.

5. Associate Degree--Any of the Associate Degrees conferred by two-year or four-year institutions such as Associate in Arts, Associate in Science, or Associate in Applied Science.
6. Two-year College--An accredited college so designed to prepare students for an Associate Degree within a two-year period.

B. Technical Course Content

The technical courses are established in light of the requirements of the essentials for Medical Record Technician schools as put forth by the American Medical Association and the American Association of Medical Record Librarians. Those courses involving both lecture and laboratory should be carefully formulated so as to integrate the laboratory experiences with the theoretical instruction in the formal lectures. The laboratory experiences in the Medical Record Science course should provide practical learning experiences of sufficient quantity and scope to prepare the student for active participation in the performance of technical duties in a Medical Record Department. Repetitive activities which do not advance the learning of the students should be avoided.

	<u>Course</u>	<u>Credit Hours</u>	
		Sem. Cr.	Qtr. Cr.
<u>ESSENTIAL</u>	Medical Record Science		
	Lecture	10	15
	Laboratory	6	9
	Work-Study	4	6
	Medical Terminology	3	5
	Anatomy and Physiology (incl. laboratory)	$\frac{4}{}$	$\frac{6}{}$
	TOTAL	$\frac{27}{}$	$\frac{41}{}$
<u>STRONGLY RECOMMENDED</u>	Data Processing	3	5
	Statistics	2	3
	Typing	$\frac{4}{}$	$\frac{6}{}$
	TOTAL	$\frac{9}{}$	$\frac{14}{}$

C. Faculty

The director of the Medical Record Technology curriculum should be a Registered Medical Record Librarian with a minimum of three years experience, regularly appointed to the faculty of the college, in accordance with usual procedures for faculty appointment. Additional instructors with experience in Medical Record Science, who meet the requirements of the college, may be appointed also, full-time or part-time. College faculty should be sufficient in number to give a faculty-student ratio that is comparable to on-going programs in the institution.

D. Cooperating Hospitals

Hospitals selected to participate in the Medical Record Technology Program should be general hospitals accredited by the Joint Commission on Hospital Accreditation. The Medical Record departments should be well organized under the direction of a qualified Medical Record Librarian with sufficient staff to provide adequate supervision of students. The general direction of the hospital-laboratory experience should be determined cooperatively by the Head of the Medical Record department of the hospital and the Director of the College Program who would be a registered Medical Record Librarian.

Hospitals chosen for the major part of the clinical experience should be large enough to provide a variety of medical care services and to provide the various kinds of practical experience required for the Medical Record Technology students. This usually would be a hospital with a minimum of 4,000 patient discharges per year. Medical Record departments chosen should provide an opportunity for student learning experiences in all phases of medical record technician work i.e., stenographic pool experience; quantitative analysis of medical records, hospital statistics, and reports; coding and indexing of diseases and operations; preparation of medical correspondence and medical abstracts; filing of medical records and reports; admitting office experience; and preparation of medical records and reports for adjunct departments, such as X-ray, laboratory, and clinical and surgical pathology. If feasible, laboratory experiences in both large and small hospitals might well be included.

E. Organization of Program

In addition to the technical specialty courses, sufficient general education and related courses would be taken to meet the college requirements for the appropriate Associate Degree.

F. Curriculum

The curriculum should be an integrated program consisting of both lecture and laboratory experiences. The laboratory experiences should be developed so they can utilize both college laboratory and cooperating hospital facilities. The laboratory phase of the program should be a true learning experience for the students throughout the two years. It is necessary that the lecture material be closely related to the laboratory work so the students realize that the theory discussed in lecture is applied in the actual laboratory experience. College laboratory facilities, if designed as a simulated hospital medical record department, will provide an opportunity to learn basic procedures and to begin to develop a certain degree of facility in handling the various records, forms, and techniques associated with the hospital program. It is significant to realize that the students must be well prepared in their basic techniques prior to participating in the hospital phase of the laboratory program. The hospital phase should be used for those learning experiences which cannot be effectively carried on in the simulated record room on the college campus. The hospital program should not be used as a place where basic elementary techniques are introduced. Insofar as possible, the laboratory experience in the hospital should be similar to that which would be encountered in the regular routines of the medical record department. Attention should be given to the construction of both the college and hospital laboratory phases of the program to insure that sufficient time is available for adequate learning to take place.

MEDICAL RECORD TECHNOLOGY

Major Field

REQUIRED - 38 Hours

MRS. 103 Med. Rec. Sci. I
 MRS. 203 Med. Rec. Sci. II
 MRS. 303 Med. Rec. Sci. III
 *MRS. 216 Med. Rec. Sci. IV
 MRS. 405 Med. Rec. Sci. V
 MRS. 505 Med. Rec. Sci. VI
 MRS. 605 Med. Rec. Sci. VII
 MRS. 113 Med. Terminology and
 Machine Transcription
 MRS. 312 Med. Machine
 Transcription

REQUIRED - 35 Hours

Eng. 103 English I
 Eng. 203 English II
 Eng. 303 English III
 S.S. 403 Prin. of Econ.
 S.S. 503 American Gov't.
 S.S. 603 Intern'l. Relations
 Bio. 404 Anat. & Physiol. I
 Bio. 504 Anat. & Physiol. II
 Psych. 123 General Psychology
 Psych. 223 Human Development

General Studies

Others

REQUIRED - 16 Hours

Data 253 Data Processing I
 Data 414 Computer Program
 MSD. 101 Orientation
 **Sec. 182 Typing I
 Sec. 282 Typing II
 Sec. 382 Typing III
 Spch. 312 Speech
 Math. 513 Statistics

**High school record determines placement in typing courses.

ELECTIVES

REQUIRED - 9 Hours

*MRS. 216 Medical Record Science IV: All students will work a minimum of ten weeks in a college approved hospital Medical Record Department during the summer quarter between the first and second years. This will be supervised by the hospital and the college. Students will be given a list of the hospitals and and a certain degree of selection will be available.

ENTRANCE REQUIREMENTS

1. One year Biology
2. One year Math
3. Typing would be helpful but not required

GRADUATION REQUIREMENTS

1. Minimum total credit hours - 98
2. Minimum cumulative index - 2.0
3. Departmental recommendation

MEDICAL RECORD TECHNOLOGY

First Year

Second Year

FIRST QUARTER

Eng. 103 English I	3
MRS. 103 Med. Rec. Sci. I	3
*Sec. 182 Typing I	2
Bio. 404 Anat. & Phys. I	4
MRS. 113 Med. Terminology	3
MSD. 101 Orientation	1
P.E. 101 Phys. Ed.	
	<u>16</u>

FOURTH QUARTER

S.S. 403 Prin. of Econ	3
MRS. 405 Med. Rec. Sci. V	5
Data 153 Intro. to Info. Processing	3
Psych. 123 Gen. Psychology	3
Elective	2
P.E. 401 Phys. Ed.	
	<u>16</u>

SECOND QUARTER

Eng. 203 English II	3
MRS. 203 Med. Rec. Sci. II	3
Sec. 282 Typing II	2
Bio. 504 Anat. & Phys. II	4
MRS. 213 Med. Terminology & Mach. Transcription	3
P.E. 201 Phys. Ed.	
	<u>15</u>

FIFTH QUARTER

S.S. 503 American Gov't.	3
MRS. 505 Med. Rec. Sci. VI	5
Data 254 Intro. Comp. Prog.	4
Psych. 223 Human Development	3
P.E. 501 Phys. Ed.	
	<u>15</u>

THIRD QUARTER

Eng. 303 English III	3
MRS. 303 Med. Rec. Sci. III	3
Sec. 382 Typing III	2
Math. 513 Statistics I	3
MRS. 312 Med. Machine Transcription	2
Elective	2
P.E. 301 Phys. Ed.	
	<u>15</u>

SIXTH QUARTER

S.S. 603 Intern'l. Relations	3
MRS. 605 Med. Rec. Sci. VII	5
Spch. 312 Speech	2
Electives	5
P.E. 601 Phys. Ed.	
	<u>15</u>

SUMMER QUARTER

MRS. 216 Med. Rec. Sci. IV	6
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First Year Credit Hour Total 52 Second Year Credit Hour Total 46

*Students proficient in this course, based upon their high school record, will elect another course in its place.

G. Recommendations for Non-Technical Courses

The Associate Degree Program permits a wide choice of general education courses for the enrichment of the individual. Each college would determine the required and elective general education courses. These elective courses could include such areas as: Data Processing and Computer Programming, Statistics, Speech, Psychology, Social Sciences, and Literature. It would be strongly recommended that, if Data Processing and Computer Programming courses are available, these be included in the basic curriculum.

The division of general education and technical courses might be on the basis of 40% to 45% general education subjects and 55% to 60% science and technical subjects.

H. Major Considerations

1. The Director of the Medical Record Technology Program should be an experienced registered Medical Record Librarian.
2. The program director should plan and coordinate an effective hospital laboratory program with directors of cooperating hospital medical record departments.
3. Evaluation of the total program should be an on-going process under the guidance of the director of the program. This should include evaluation of the effectiveness of the hospital laboratory experience as well as the acceptability of the cooperating hospitals.
4. A joint Program Advisory Committee, composed of both representatives from the college and from some of the cooperating hospitals, is highly recommended.
5. If adequate clinical facilities are not readily available in the immediate environment of the college, it may be necessary to plan a simulated medical record department in the college laboratory, and to design a work-study program during the summer session to enable the students to have an opportunity to receive the necessary clinical experience, and to provide for additional clinical experiences during the senior year of the program.

I. Suggestions for Planning

1. The entire Medical Record Technology program, lecture and laboratory experiences, should be planned to operate within regular school sessions or summer sessions.

2. Summer sessions may be utilized for hospital-laboratory experiences when necessary. However, if Associate Degree Programs are properly planned, there should be no need to use two summer sessions.
3. Assuming some students may wish to continue study toward a Baccalaureate Degree, consideration should be given to include those liberal arts and science courses for which credit might be transferred to a four-year Medical Record Science Program.

The Associate Degree Program should provide a complete course in Medical Record Technology for one who wishes immediate employment in a medical record department of a hospital or clinic (under the supervision of the medical record librarian), as well as providing consideration for the student who desires to transfer to a Baccalaureate program in Medical Record Science.

These guidelines follow very closely those prepared by the Education and Registry Committee of the American Association of Medical Record Librarians entitled, GUIDELINES FOR THE DEVELOPMENT OF MEDICAL RECORD TECHNICIAN PROGRAMS IN JUNIOR COLLEGES.

CONCLUSION

The study shows an overwhelming national need for the preparation of increased numbers of persons to fill the role of Medical Record Technician. Furthermore, there is definite need for programs which will be designed around the technical needs of the field as well as being "well rounded" with regard to a general education.

The advantages of developing such a curriculum on a two-year college campus, as a part of the regular offerings in the health technologies, are numerous. The students have the opportunity to gain from the association with other students in academic programs other than Medical Record Technology, and have the opportunity of exchanging ideas and concepts which add to the general education value of a collegiate program. Another major advantage to the location on a college campus is that the students may learn the basic skills and understandings of their technical field without taking up much needed space in a working hospital and without interfering with the on-going functioning of a busy Medical Record department. Furthermore, it is possible to provide a uniform education to more students than would be possible in most hospital situations. The number of students can be divided over a variety of clinical facilities for the clinical experience needed while the basic skills and general education courses can be taken in larger groups on campus. The cost of the program is divided over a number of academic areas at the collegiate level whereas the cost of the total program must be absorbed by a single hospital if the program is hospital based and the lower number of students then make the individual student cost for the program disproportionately high.

When a Medical Record Technology curriculum is proposed for inclusion in a two-year college setting, the college administration must take into consideration the need for adequate clinical facilities for the laboratory experience. If the college is located in a metropolitan area with several hospitals preparation must be made well in advance for seeking the cooperation of the hospitals in the development of an "extended campus." Care must be made to select hospitals which are large enough to provide a wide variety of experiences for the students and which have qualified personnel in the Medical Record department. If the hospitals are close by and easily accessible to the students, the hospital experience may be incorporated into the regular academic year. In the instance where the facilities of the immediate environment are inadequate to meet the total needs of the number of students in the program, a summer phase may be developed where the students will gain the major part of their hospital experience between the first and second years of the program. This provides them ample time during the first year to become familiar with the skills associated with the field and to become familiar and proficient with the specialty areas such as coding and indexing, medical terminology, and the wide variety of forms used in the Medical Record department before beginning the hospital experience. There is a two-fold advantage in

developing a cooperative program with hospitals for employing the students during this summer period. One advantage is the student becomes a part of an on-going department and has the psychological advantage of knowing the work they are doing is of importance over and above that of pure education. Secondly, the student is given an opportunity to add to their personal finances and alleviate the economic drain caused by their educational program. This type of a "work-study" program brings the college faculty and the medical record personnel of the hospitals closer together and provides for enrichment of the student's program.

The senior year should also include laboratory experiences in the hospital. This will provide the students with additional opportunity to practice their skills and techniques and put into practice the more sophisticated understandings they study in the senior year of the program. There is an advantage in attempting to have the hospital experiences take place in different types or sizes of hospitals since the diversity of responsibilities will be of benefit to the total learning experience.

To insure the type of cooperation that is necessary to provide the best education for the student, it is imperative that the early planning for a new curriculum include both college educators and medical record personnel who are actively practicing in the field. The most feasible plan is to work closely with the American Association of Medical Record Librarians, the state chapters of the national association, and regional medical record librarian groups. In this way the program can intermesh with the college needs, the hospital needs, the facilities available at both, and take advantage of the wealth of resource material available from the professional associations both in terms of personnel and printed materials.

The curriculum should be developed so it meets the requirements of the American Association of Medical Record Librarians and is eligible for accreditation by the Association so the graduates of the curriculum may take the examination to become Accredited Record Technicians. Information pertinent to this accreditation may be received from the Executive Director, American Association of Medical Record Librarians, 211 East Chicago Avenue, Chicago, Illinois 60611.

Although a two-year college cannot insure that the credits earned in this curriculum will be fully transferable to a four-year Medical Record Librarian curriculum, consideration should be given to the possibility of developing the curriculum so that it is practical to assume that the majority of the program would be transferable, as long as it does not interfere with the primary goal of the curriculum, namely to educate and prepare persons who will be well qualified to carry out the duties of a Medical Record Technician in a hospital.

A P P E N D I X I
HOSPITAL SURVEY QUESTIONNAIRE

Hospital Name _____

Address _____

Administrator's Name _____

1- Number of Registered Medical Record Librarians presently employed:
Total _____ Female _____ Male _____

2- Number of Medical Record Technicians (or comparable) presently
employed: Total _____ Female _____ Male _____

3- Number of Medical Record Technician positions anticipated to exist by:
1969 _____
1975 _____

4- Starting salary for Medical Record Technicians: _____

5- Work schedule for Medical Record Technicians:
Weeks per year _____
Days per week _____
Hours per day _____

6- Check at the right, those which apply to Medical
Record Technicians in your hospital:

Civil Service rating required _____
Accreditation by American Association _____
Medical Record Librarians required _____
Local or regional licensing required _____

7- Background of present Medical Record Technicians.
Indicate number of technicians in each of the
following:

High school graduates only _____
Less than 2 years post high school study _____
Two-year college graduates _____
Four-year college graduates and above _____

8- Average length of retention of Medical Record
Technicians on the job (in months):

Female _____
Male _____

9- College courses you feel would be desirable for
Medical Record Technicians (check below):

Manual Shorthand	_____	Filing	_____
Machine Shorthand	_____	Data Processing	_____
Typing	_____	Business Law	_____
Medical Terminology	_____	Mathematics	_____
Anat. and Physiol.	_____	Machine Duplication	_____
Accounting	_____	Office Machines	_____

A P P E N D I X I I

**RESULTS FROM QUESTIONNAIRES RETURNED
BY HOSPITALS COOPERATING IN THE
MEDICAL RECORD TECHNOLOGY GRANT STUDY**

RESULTS FROM QUESTIONNAIRES RETURNED BY HOSPITALS COOPERATING IN THE MEDICAL RECORD TECHNOLOGY GRANT STUDY

Group	No. of Hospitals		No. Employed		Anticipated No. MRT Positions		Average Monthly Starting Salary			Rating Required				
	Contacted	Replied % Replied	MRL'S		MRT'S		1969	1975	Lowest	Highest	Average NYS Avg.	Civil Service	ART Lic.	
			1969	1975										
State	111	51	45.9	21	127	168	207	\$230	\$614	\$366	\$428	26	9	2
County	86	43	50	17	71	115	113	200	457	292	345	6	7	2
City	59	20	33.9	15	106	125	160	217	500	338	391	2	3	2
City-County	13	3	23.1	1	5	9	14	200	398	299	----	0	2	0
Hospital District	16	3	18.7	4	7	14	16	250	350	300	----	0	1	0
Church Related	213	103	48.4	84	267	338	367	167	550	310	368	2	24	2
Other Vol. Non-profit	435	228	52.4	177	595	773	946	140	505	313	341	12	47	11
Individual Proprietary	4	2	50	2	1	5	10	368	368	368	368	0	1	0
Partnership Proprietary	22	9	40.9	6	21	26	39	325	399	363	363	2	3	0
Corp. for Profit	40	13	32.5	17	47	35	45	300	541	374	419	1	4	1
Air Force	6	2	33.3	2	7	3	3	266	266	266	----	1	0	1
Army	8	1	12.5	1	6	7	8	268	268	268	----	0	0	0
Navy	6	2	33.3	2	----	----	----	----	----	----	----	----	----	----
P.H.S.	12	2	16.7	5	3	7	10	377	398	387	377	1	0	0
V.A.	26	20	76.9	8	17	24	26	303	449	382	341	9	2	0
Other Federal	3	1	33.3	----	----	----	----	----	----	----	----	----	----	----
TOTALS	1060	503	47.5	362	1280	1647	1966	\$257	\$433	\$331	\$374	62	103	20

A P P E N D I X I I I
M E D I C A L R E C O R D S C I E N C E C O U R S E
D E S C R I P T I O N S , O B J E C T I V E S , A N D O U T L I N E S

Medical Record Science I - MRS 103
Credit three hours
One lecture, two laboratories per week

An introduction to the history of medicine, the hospital, and the medical record. Discussion of the organization of the modern hospital with emphasis on the medical record department and the medical record profession. Laboratory includes introduction to a simulated medical record department, its organization, and function.

Course Objectives:

1. Gain interest in the health field through history of medicine, hospitals, and medical records.
2. Orient the student with the modern hospital and its physical facilities.
3. Gain an understanding of the role of the hospital in the economic and educational life of the community.
4. Develop an understanding of the various types of hospitals, the organization of their medical staffs, and their responsibility for professional evaluation of patient care.
5. Instruct the student in the importance of medical record department work in relation to all other hospital departments.
6. Gain an understanding of the position of the medical record technician as a member of the health team and of his contribution to better patient care through medical records.
7. Learn the general format of the medical record, its importance and usage in the field of medicine and in the hospital for total patient care.
8. Acquire a knowledge of the procedures involved in preparing the medical record for permanent filing.
9. Gain an understanding of and appreciation for the Medical Record Librarian associations and educational programs.
10. Acquire a knowledge and understanding of professional ethics in medicine and medical records.

Laboratory Objectives:

1. Acquaint the student with the facilities of a medical record department.
2. Learn the organization of personnel within the medical record department.
3. Receive an introduction to the medical record and its contributors.
4. Acquire a knowledge of methods used in developing medical record forms.
5. Learn methods in preparing admission forms and patients' index cards.

MRS 103 COURSE OUTLINE

I. Orientation

- A. Introduction to philosophy of hospitals
- B. Organization of hospitals
- C. Medical Record Department
 - 1. Definition of medical record
 - 2. Organization of medical record department

II. History

- A. Medicine
 - 1. Development
 - 2. Important men
- B. Hospitals
 - 1. Early institutions
 - 2. American hospitals
 - 3. Standardization and accreditation
- C. Medical Records
 - 1. Early medical records
 - 2. Development

III. The Modern Hospital

- A. Turning point
- B. Functions
- C. Mechanization within departments
- D. Personnel--paramedical professions
- E. Medical staff
 - 1. Types
 - 2. Committees
- F. Classifications
- G. Specialized institutions

IV. Medical Record Department

- A. Functions
- B. Procedures within department
 - 1. Admitting procedures
 - 2. Secretarial procedures

3. Discharge procedures
4. Release of confidential information

V. Medical Record Profession

- A. Medical Record Librarian--R.R.L. and C.R.L.
- B. Medical Record Technician--A.R.T.
- C. Associations
 1. AAMRL
 2. STATE
 3. LOCAL
 4. INTERNATIONAL ASSOCIATIONS
- D. Education and registrations
 1. MRL--schools and seminar refresher courses
 2. MRT--schools and correspondence study

VI. Ethics

- A. Definition
- B. Professional and medical ethics
 1. Hippocratic oath
 2. Confidentiality of medical record
 3. Pledge of AAMRL

Medical Record Science II - MRS 203
Credit three hours
One lecture, two laboratories per week

An orientation to various methods of filing and requirements of hospital and accreditation agencies. Discussion of the development and evaluation of the medical record and methods used for compiling statistics. Laboratory includes working with filing systems and medical records.

Course Objectives:

1. Acquire a knowledge of the various filing methods used in maintaining and retrieving medical records.
2. Develop a recognition of the value of keeping accurate, up-to-date medical records.
3. Gain a knowledge and understanding of hospital and accrediting agency requirements and how they affect the medical record.
4. Acquire a knowledge of the component parts of the medical record and its sources.
5. Develop the skill of analyzing a medical record quantitatively.
6. Gain an understanding of the work flow involved in the completion of the medical record.
7. Acquire the knowledge of methods and forms used in compiling and reporting statistics for hospital and medical reports.

Laboratory Objectives:

1. Develop skill in alphabetic filing.
2. Develop skill in numeric filing.
3. Develop skill in Soundex filing.
4. Develop skill in assembling medical records after discharge.
5. Gain experience in assigning service classification.
6. Gain experience in evaluating medical records quantitatively.

Laboratory Objectives (cont'd.):

7. Develop ability to abstract daily statistics from discharges.
8. Acquire knowledge of the formulas used in obtaining statistics for hospital reports.
9. Develop skill in methods used in compiling monthly statistical reports.

MRS 203 COURSE OUTLINE

I. Filing

A. Introduction

1. Necessity and use
2. Types (alphabetical, numerical, combination)

B. Organization

1. Centralized or decentralized
2. Planning and equipment
3. Methods
4. Advantages and disadvantages--each type

C. Preservation of records

1. Legal requirements
2. Research requirements
3. Microfilming--preparation and type

II. Use of Medical Record

A. Personal document

1. Current and future illnesses
2. Insurance claims, compensation
3. Proof of age, injury, death

B. Impersonal document

1. Statistics
2. Research and education
3. Evaluation of patient care

III. Ownership of Medical Record

A. Hospital--record itself

B. Patient--content (confidential document)

IV. Types of Hospital Medical Records

A. In-patient medical records

1. Medical
2. Surgical
3. Obstetrical
4. Specialties

- B. Out-patient medical records
 - 1. Clinic records
 - 2. Emergency room records
 - 3. Private out-patients

- V. Hospital and Accrediting Agency Requirements
 - A. JCAH
 - B. State laws
 - C. Medical staff bylaws

- VI. Analysis of Medical Records
 - A. Assembling medical record
 - 1. Basic requirements
 - 2. Typical format
 - 3. Special types
 - 4. Miscellaneous forms and reports

 - B. Service assignment
 - 1. Definition
 - 2. Basic services
 - 3. Procedure (diagnosis/service)

 - C. Quantitative analysis
 - 1. Definition and purpose
 - 2. Method

- VII. Completion of Medical Record
 - A. Incomplete reports
 - B. Incomplete medical section
 - C. Incomplete nursing section

- VIII. Compilation of statistics
 - A. Purpose
 - 1. Administrative control of present and future hospital operations
 - 2. Medical staff measurement of professional performance
 - 3. Accrediting agencies yardstick of hospital efficiency
 - 4. Public health services, local and national, source of vital statistics and health problems

B. Types

1. Daily census
2. Monthly and annual service analysis
3. Comparative report of professional performance
4. Vital statistics
5. Public health communicable reports

C. Sources

1. Medical record
2. Daily floor census
3. Birth, death, and fetal death certificates

D. Tabulation

1. Daily discharge service analysis
2. Daily census sheets
3. Birth and death registers

E. Automatic data processing

1. Definition
2. Use
3. Methods

Medical Record Science III - MRS 303
Credit three hours
One lecture, two laboratories per week

An introduction to classification systems and methods of coding and indexing with special instruction in Standard Nomenclature of Diseases and Operations and International Classification of Diseases, Adapted. Laboratory work includes coding and indexing by SNODO and ICDA correlated with a sampling of case retrieval for research.

Course Objectives:

1. Acquire a background history of classification systems.
2. Acquire a knowledge of the development of SNODO.
3. Learn the mechanics of coding by SNODO.
4. Learn techniques in indexing.
5. Acquire knowledge of development and use of ISC and ICDA.
6. Learn the mechanics of coding by ICDA.
7. Learn methods of developing disease and operation indexes.

Laboratory Objectives:

1. Learn usage of topographic and etiologic disease index of SNODO.
2. Code sample diseases and conditions by SNODO.
3. Code supplementary and non-diagnostic terms.
Code sample operations by SNODO.
5. Coding problems.
6. Practice in indexing SNODO codes.
7. Practice in indexing code numbers by dual grouping.
8. Practice in cross indexing SNODO code numbers.
9. Experience in coding diseases by ICDA.
10. Experience in coding operations by ICDA.
11. Gain knowledge of indexing equipment.

MRS 303 COURSE OUTLINE

I. Orientation

- A. History of development of disease nomenclature and systems of classification of diseases.
- B. Purpose of standard nomenclature of diseases and operations.
- C. Organization of disease code as a dual system
- D. Organization of operation code as a dual system
- E. History of development and purpose of International Statistical Classification and ICDA

II. The Standard Nomenclature of Diseases and Operations

- A. Introduction
- B. Classification

1. Topographical section
2. Etiological section
3. Nondiagnostic terms
4. Supplementary terms
5. Anesthesia section
6. Use of index
7. Operative procedures
8. Appendix

C. Mechanics for coding

1. Master codes and open end codes
2. Use of decimal digits with topography and etiology
3. Neoplasm codes
 - a. Basic
 - b. Behavior
 - c. Decimal digits
4. Use of X and Y
5. Similar terms
6. Synonymous terms
7. Use of instructions and footnotes
8. Use of special operative digits
9. Special problems (heart, obstetrics) and non-diagnostic terms

III. Indexes

A. Required indexes

1. Types
 - a. Patient and index
 - b. Disease index

- c. Operation index
 - d. Physician's index
 - 2. Purpose
 - 3. Content
 - 4. Methods
 - B. Special indexes
 - 1. Number index
 - 2. Radiology index
 - 3. Pathology index
 - 4. Anesthesia index
 - 5. Tumor index
 - 6. Heart index
 - 7. Medical illustration index
 - C. Value of indexes
 - D. Indexing equipment
 - 1. Loose leaf or ledger
 - 2. Visible
 - 3. Vertical
 - 4. Mechanic--electronic
 - E. Techniques in posting
 - 1. Dual grouping
 - 2. Grouping by master code
 - 3. Class indexing
- IV. International Classification of Diseases, Adapted
- A. Mechanics of coding
 - 1. Diseases
 - 2. Operations
 - 3. E codes
 - 4. Other special codes
 - B. Indexing methods

Medical Record Science IV - MRS 216
Credit six hours

A supervised summer practical experience in the Medical Record Department of a large hospital with adequate facilities to provide a varied work opportunity in the major aspects of Medical Record Science. Students will work under the supervision of a qualified Record Librarian of the hospital to which they are assigned and will also have frequent college faculty consultation. The program is designed to enable students to obtain actual working experience in procedures studied in the classroom and college laboratory.

Course Objectives:

1. Become acquainted with actual working atmosphere of a large Medical Record Department.
2. Gain insight into organization and functions of an active hospital Medical Record Department.
3. Become aware of the problems of Medical Record personnel.
4. Learn to accept responsibilities of the Medical Record Department.
5. Gain experience working with other professional and non-professional personnel.
6. Develop additional skill in Medical Record procedures under stress of daily working conditions.
7. Become acquainted with work flow scheduling in a busy Medical Record Department.
8. Acquire further understanding of the need to preserve the confidentiality of the Medical Record.
9. Develop flexibility in carrying out various assignments.

MRS 216 COURSE OUTLINE

- I. Practical Experiences Considered Desirable During Supervised Summer Affiliation
 - A. Filing and handling requests
 - B. Admission procedures
 - C. Discharge analysis and statistics
 - D. Coding and indexing with sample research project, if possible
 - E. Transcription
 - F. Miscellaneous duties as needed for substitution of absentee employees

Medical Record Science V - MRS 405
Credit five hours
Three lectures, two laboratories per week

An introduction to the medical ethics and the legal aspects of medical records. Special attention is given to authorizations, release of information, and the handling of medical records in court. Laboratory work includes experience in planning and developing forms for authorization and practice in releasing information.

Course Objectives:

1. To provide an opportunity for discussion and comparison of organization and procedures used in affiliate hospitals.
2. To gain an understanding of the confidential nature of medical information and the medical record.
3. Gain an understanding of public relations consistent with correct professional ethics.
4. Acquire a knowledge of the most commonly used legal terms.
5. Develop an awareness of laws pertaining to medical information.
6. Introduce various types of authorization and consent forms with a history of their evolution.
7. Acquire a knowledge of the principles involved in the release of medical information.
8. Provide guides for the selection of pertinent information from the medical record for release to authorized parties.
9. Develop an understanding of court procedure for introducing the medical record as evidence.

Laboratory Objectives:

1. Prepare an organization chart and work-flow chart reflecting the affiliate medical record department.
2. Practice in handling requests for social and/or medical information found in the medical record and releasing it verbally.
3. Design various types of consent forms and forms for release of medical information.

Laboratory Objectives (cont'd.):

4. Provide an opportunity to check authorizations for release of information.
5. Develop skill in preparing abstracts.
6. Develop skill in preparing summaries.
7. Gain experience in processing a subpoena duces tecum and preparing a medical record for court.
8. Provide the students with a facsimile of courtroom procedure and the introduction of the medical record as evidence.
9. Practice in releasing information to parties where authorization is not required.

MRS 405 COURSE OUTLINE

- I. Summer Hospital Affiliation
 - A. Classroom discussion of affiliation--each student presents a 10-minute talk
 - B. Private conference with each student to correlate medical record librarian and student's reports.
- II. Introduction to Medical Jurisprudence
 - A. Definition of medical jurisprudence
 - B. History of laws pertaining to hospitals, medical care, and medical records.
- III. Property Rights and Medical Ethics
 - A. Patient
 - B. Hospital
 - C. Physician
- IV. Legal Terminology
- V. Release of Information
 - A. Authorization
 - 1. Insurance company
 - 2. Attorney
 - B. Subpoena duces tecum
 - C. Without authorization
 - 1. Attending physician or coroner
 - 2. Hospital
 - 3. Compensation board
 - 4. News media
 - 5. Police
 - 6. Immediate family of deceased--autopsy findings

Medical Record Science VI - MRS 505
Credit five hours
Three lectures, two laboratories per week

An introduction to additional medical record responsibilities which vary with type of health institution. Included are Specialized Registries as the Tumor Registry, Out-Patient Department, Medical Library, and the role of the Medical Record Department in disaster planning. Comparison of medical record procedures in specialized and/or long-term hospitals and in nursing homes with those in a general hospital. Laboratory includes practice in working with the Tumor Registry, and facsimile experience of working in an Out-Patient Department, Medical Library and Disaster Planning. A field trip to a specialized and/or long-term hospital is included.

Course Objectives:

1. Acquire an understanding of specialized registries, and how they assist the follow-up of patients and future research.
2. Gain a knowledge of the organization of the Tumor Registry.
3. Familiarize the student with out-patient department procedures involving medical records.
4. Introduce the fundamentals of medical library science.
5. Acquire a knowledge of the role of the medical record department in disaster planning.
6. Gain an understanding of medical record requirements in specialized and long-term hospitals.
7. Familiarize the student with medical record requirements for nursing homes.
8. Introduce the student to the variety of statistical reports prepared for agencies and organizations outside the hospital.

Laboratory Objectives:

1. Acquaint the student with forms of the Tumor Registry and Cardiac Registry.
2. Gain experience in cataloging Tumor Registry cases.
3. Gain experience in follow-up Tumor Registry cases and preparing Tumor Registry reports.

Laboratory Objectives (cont'd.):

4. Introduce the out-patient medical record, how it is compiled and filed.
5. Procedures for filling out out-patient requests and follow-up.
6. Field trip to medical library at a local hospital.
7. Prepare a kit for tagging patients in a disaster and review disaster routine.
8. Study medical record forms and procedures in specialized and long-term hospitals.
9. Organize a medical record file for a nursing home.
10. Prepare a report for AHA and JCAH survey, and a PAS report form.

MRS 505 COURSE OUTLINE

I. Special Registries

- A. Purpose
- B. Types
- C. Methods
 - 1. Organization
 - 2. Follow-up procedure
- D. Accreditation requirements
 - 1. American Cancer Society
 - 2. JCAH
 - 3. American Heart Association

II. Out-Patient Department

- A. Organization
 - 1. Types of clinics
 - 2. Basic medical record requirements
- B. Correlation with medical record department
- C. Filing methods

III. Medical Reference Library

- A. Organization
 - 1. Card file
 - 2. Accession book
- B. Classification of books
 - 1. Dewey
 - 2. Library of Congress
 - 3. Boston Library
- C. Inventory of journals
 - 1. Card file
 - 2. Subscription data

IV. Disaster Plan

- A. Purpose
- B. Procedures for medical record department

1. Call system
2. Materials required

C. Coordination with hospital master plan

V. Long-Term and Specialized Hospitals

- A. Types
- B. Medical record variations
- C. Special statistical requirements
- D. Disease and operative indexes

VI. Nursing Home Facilities

- A. Medical record requirements
- B. Coordination with referring hospital
- C. Accreditation agency reports

VII. Special Agency Statistical Reports

- A. Accreditation forms
- B. Specialized surveys
 1. PAS
 2. Others

Medical Record Science VII - MRS 605
Credit five hours
Three lectures, two laboratories per week

An introduction to the basic principles of organization and management with special emphasis on the interdepartmental and departmental organization and projects for planning a Medical Record Department, developing departmental personnel policies and in solving departmental organization and personnel problems. Laboratory includes experience in local small hospitals assisting the Head of the Medical Record Department in supervisory duties and gaining further experience in medical record procedures.

Course Objectives:

1. Gain knowledge of basic principles of efficient organization of a medical record department and its effect on total patient care.
2. Acquire understanding of personnel organization and selection.
3. Gain knowledge of value and method of developing departmental procedure manual.
4. Gain understanding of supervisory techniques necessary for proper management of a medical record department.
5. Acquire understanding of methods of evaluation of medical record department procedures.
6. Acquire understanding of interdepartmental cooperation in areas involving medical record procedures.
7. Acquire knowledge of functions of medical staff committees that involve the medical record department.
8. Become familiar with methods of reporting findings of medical staff committee reviews.

Laboratory Objectives:

1. Prepare organization charts for varying size medical record departments.
2. Gain experience in planning a new or expanding medical record department.
3. Develop a work-flow chart for a medical record department.

Laboratory Objectives (cont'd.):

4. Prepare procedure manual for select jobs in a medical record department.
5. Gain experience preparing work simplification procedure for medical record department.
6. Gain experience selecting medical records for various committee reviews.
7. Gain experience in solving personnel and interdepartmental problems.
8. Gain experience in affiliate hospital in chart analysis and coding.
9. Gain experience in affiliate hospital in management of medical record department and in carrying out a hypothetical research project.

MRS 605 COURSE OUTLINE

I. Organization of Medical Record Department

A. Building facilities

1. Location
2. Size
3. Layout

B. Personnel

C. Equipment

1. Furniture
2. Medical record supplies

D. Budget

II. Management of Medical Record Department

A. Organization of authority

1. Organization chart
2. Work-flow chart

B. Guidelines for personnel organization

1. Job description and analysis
2. Procedure manual
3. Personnel selection and relations

C. Supervisory functions and techniques

D. Evaluation of medical record procedures--work simplification

E. Professional responsibilities

III. Interdepartmental Relations

A. Communication

B. Coordination

C. Uniformity of basic hospital policies

IV. Medical Staff Committees

A. Types and functions

B. Responsibility of medical record department

1. Selection of medical records
2. Attendance
3. Reports

A P P E N D I X I V
"EXTENDED CAMPUS" HOSPITAL CONTRACT

A G R E E M E N T

THIS AGREEMENT, made this _____ day of _____, by and between
STATE UNIVERSITY OF NEW YORK, AGRICULTURAL AND TECHNICAL COLLEGE, Alfred, New York
hereinafter referred to as the College, and _____
_____, hereinafter referred to as the Hospital,

WITNESSETH:

WHEREAS, said College has established an educational program in Medical Record
Technology; and

WHEREAS, the College desires to enter into a cooperative arrangement with the
Hospital for the purpose of providing adequate clinical experience for the students
of said education program in Medical Record Technology; and

WHEREAS, the Hospital believes the value of the employment of such students
will add to its operation,

NOW, THEREFORE, in consideration of the mutual covenants and agreements
herein contained, the parties hereto agree as follows:

1. The College assumes the responsibility of preparing the student Medical
Record Technicians, prior to their employment by the Hospital, in the following
areas:

ADMISSIONS:

1. Prepare admission forms
2. Prepare Patient index cards
3. Use patient's register
4. File - patient index cards and record folders
 - a. Alphabetical
 - b. Numerical
 - c. Soundex
 - d. Terminal digit

DISCHARGES:

1. Assemble medical records
2. Check with discharge list
3. Compute census days
4. Assign service classification
5. Analyze medical records for deficiencies
6. Prepare daily discharge statistics

STATISTICS:

1. Prepare daily census report
2. Prepare monthly statistical reports
3. Compute averages and percentages

CODING AND INDEXING:

1. Code diseases and operations by SNDO
2. Index diseases and operations by SNDO
 - a. Dual grouping
 - b. Cross indexing
3. Code diseases and operations by ICDA
4. Index diseases and operations by ICDA

TRANSCRIPTION AND TERMINOLOGY:

1. Transcribe histories, physical examinations, operations, consultations, and operative reports for a variety of medical services.
2. Pronounce, spell and interpret medical terms correctly.

2. The College will provide a faculty supervisor who will visit the Hospital at least twice during the ten week period of student employment, this visit to be at the convenience of the Hospital Medical Record Department Head.

3. The Hospital reserves the right, in its absolute discretion, to refuse its facilities and services to any student who does not meet the professional or other requirements of the Hospital or any appropriate authority controlling and directing said Hospital.

4. The College will instruct its students and faculty to respect the confidential nature of all information which they may obtain from patients and records of the Hospital.

5. The Hospital agrees to employ subject to Paragraph "3" above, at the existing New York State minimum wage, _____ student(s) for a minimum period of ten weeks between the cessation of the College spring academic quarter and the beginning of the College fall academic quarter.

6. The Hospital, in so far as it does not interfere with the normal functioning of the Medical Record Department, agrees to provide experiences for the students in the following areas:

- a. Filing and handling requests
- b. Admission procedures
- c. Discharge analysis and statistics
- d. Coding and indexing with sample research project, if possible.
- e. Transcription
- f. Miscellaneous duties as needed for substitution for absentee employees

7. The Hospital agrees to assist the program by providing, through its supervisory personnel, bi-weekly evaluations of the said students. The evaluation form to be provided by the College.

8. The College agrees the students will be subject to all rules, regulations, and privileges pertaining to regular employees of the Hospital.

9. This agreement shall become effective immediately upon execution by the parties and will continue in full force and effect until terminated as hereinafter provided. This agreement may be modified at any time upon the written request of either party with the consent of the other party. This agreement may be terminated at any time by mutual consent of the parties, or it may be terminated by either party upon written notice to the other party as provided in Paragraph "11" of this agreement; such non-consensual termination shall become effective six months after proper notice. In the event of non-consensual termination of this agreement by either party, such termination shall not become effective until the students involved in the cooperative program shall have an opportunity to complete the full experience so long as the cause for the terminations does not fall within the boundaries of Paragraphs "3" and "8" above, despite the fact that this period required for program completion may exceed the six month period established in this Paragraph.

10. The parties hereto recognize that, in the performance of this contract, the greatest benefits will be derived by promoting the interests of both parties, and each of the parties does, therefore, enter into this contract with the intention of loyally cooperating with the other in carrying out the terms of this contract and each party agrees to interpret its provisions, insofar as it may legally do so, in such manner as will best promote the interests of both and render the highest service to the public.

11. All notices to parties hereunder must be in writing signed by the party

giving it, and shall be served either personally or by registered mail addressed as follows:

TO THE COLLEGE:

Chairman, Division of Health Technologies
State University of New York
Agricultural and Technical College
Alfred, New York 14802

TO THE HOSPITAL:

or to such other addresses as may be hereafter designated by notice. All notices become effective only when received by the addressee.

12. This agreement constitutes the entire agreement of the parties hereto and all previous communications between the parties, whether written or oral, with reference to the subject matter of this contract, are hereby superseded.

IN WITNESS WHEREOF, the parties hereto have executed this agreement the day and year first above written.

Chairman, Division of Health Technologies

Hospital

A P P E N D I X V
D E S C R I P T I O N O F S U M M E R A F F I L I A T I O N

Description of Summer Affiliation

I. Length of Work-Study Experience

The summer affiliation in a cooperating hospital shall be so scheduled that students will begin the work-study phase the week following termination of the spring quarter on the college campus. The affiliation shall be for a minimum of ten weeks. Inasmuch as the summer phase begins immediately after the termination of the spring quarter, this allows 11 to 13 weeks from the beginning of the experience to the beginning of classes in the fall. This provides an opportunity for an additional one to three weeks of employment after the ten week affiliation, if the hospital and student so desire.

II. Work Experience

A practical work experience, under supervision, in all types of Medical Record procedures previously studied through classroom presentation and initial college laboratory practice is scheduled. Listed below is a suggested rotation schedule:

A. File and request clerk Admissions	1 week
B. Discharge analysis and statistics	3 weeks
C. Coding and indexing Sample research project	2 weeks
D. Transcription--histories, physicals, consultations, discharge summaries, operative reports.	3 weeks
E. Substitution for absentee employee (day-to-day)	1 week

III. Evaluation of Students

The evaluation of the student's progress during the summer work-study experience will be three-fold.

- A. Bi-weekly evaluation sheet completed by the director of the cooperating hospital Medical Record Department. (A copy of this evaluation form is found on the following page.)
- B. Evaluation by director of Medical Record Technology curriculum resulting from individual conferences at the time of supervisory visits to the cooperating hospitals during the summer affiliation.

EVALUATION OF DIRECTED PRACTICE
IN COOPERATING HOSPITAL

NAME OF STUDENT _____

DATE _____

NAME OF HOSPITAL _____

	SUPERIOR	ABOVE AVERAGE	AVERAGE	BELOW AVERAGE	POOR
Theoretical Knowledge					
Practical Application of Theory					
<u>Types of Experience</u>					
1. Filing and handling requests					
2. Admission procedures					
3. Discharge analysis					
4. Statistics					
5. Coding					
6. Indexing					
7. Research project					
8. Transcription					
9. Miscellaneous:					

COMMENTS:

	GOOD	ADEQUATE	POOR
<u>Personal Qualities</u>			
1. Personal grooming			
2. Poise			
3. Relationship with others			
4. Flexibility			
5. Punctuality			
6. Professional ethics			

COMMENTS:

- C. Submission of a comprehensive final report of the work-study learning experiences, by each student. This report will also include a daily log of experiences.

IV. Financial Remuneration

In order to preclude competition between the hospitals for the summer affiliation agreement has been made that the salary for the students will be designated as the current New York State minimum wage.

V. Living Accommodations

Each student will be responsible for arranging for their own living accommodations during the summer period. Some of the hospitals have indicated the availability of staff residences for this period.

VI. Selection of Cooperating Hospitals

- A. Hospital must be accredited by the Joint Commission on Hospital Accreditation.
- B. Hospitals are to be situated in large metropolitan areas and should have an annual discharge rate of at least 10,000.
- C. Hospital Medical Record Department must be staffed by qualified medical record personnel.

A P P E N D I X VI
LIST OF COOPERATING HOSPITALS

Cooperating Hospitals

Binghamton, New York

Our Lady of Lourdes Memorial Hospital

Binghamton General Hospital

Buffalo, New York

Sisters of Charity Hospital

Millard Fillmore Hospital

Edward J. Meyer Memorial Hospital

Mercy Hospital

Deaconess Hospital of Buffalo

Childrens Hospital

Buffalo General Hospital

Rochester, New York

St. Mary's Hospital

Rochester General Hospital

Highland Hospital

Genesee Hospital

Syracuse, New York

Syracuse Memorial Hospital

Crouse-Irving Hospital

St. Joseph's Hospital

A P P E N D I X V I I
RESULTS FROM QUESTIONNAIRES BY
HOSPITAL CONTROL GROUPS

1. How many Medical Record Librarians employed?

Total	<u>21</u>	Average	_____
Male	_____	Male	_____
Female	<u>14</u>	Female	<u>11.66%</u>

2. How many Medical Record Technicians employed?

Total	<u>127</u>	Average	_____
Male	<u>5</u>	Male	<u>3.93%</u>
Female	<u>92</u>	Female	<u>72.44%</u>

3. How many were contacted? 111

How many replied? 51

Percentage 45.95%

4. Number of Medical Record Technician positions anticipated to exist by:

1969	<u>168</u>	1975	<u>207</u>	Total	<u>375</u>
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5. Starting Salary:

Lowest \$230.00

Highest \$614.00

Average for Total Group	<u>\$366.00</u>
Average for New York State	<u>\$428.50</u>
Average for Each State	_____

Alabama	_____	Kentucky	<u>\$230.-</u>	North Dakota	_____
Alaska	<u>\$583.-</u>	Louisiana	_____	Ohio	_____
Arizona	<u>\$760.-</u>	Maine	<u>\$351.-</u>	Oklahoma	_____
Arkansas	_____	Maryland	<u>\$368.-</u>	Oregon	_____
California	_____	Massachusetts	<u>\$444.30</u>	Pennsylvania	<u>\$330.75</u>
Colorado	<u>\$302.-</u>	Michigan	_____	Rhode Island	<u>\$333.-</u>
Connecticut	<u>\$350.75</u>	Minnesota	_____	South Carolina	_____
Delaware	_____	Mississippi	_____	South Dakota	_____
Dist. of Columbia	_____	Missouri	<u>\$238.-</u>	Tennessee	_____
Florida	<u>\$250.-</u>	Montana	_____	Texas	_____
Georgia	_____	Nebraska	<u>\$350.-</u>	Utah	_____
Hawaii	_____	Nevada	_____	Vermont	<u>\$281.-</u>
Idaho	_____	New Hampshire	_____	Virginia	_____
Illinois	_____	New Jersey	_____	Washington	_____
Indiana	_____	New Mexico	_____	West Virginia	_____
Iowa	_____	New York	<u>\$428.50</u>	Wisconsin	_____
Kansas	_____	North Carolina	_____	Wyoming	_____

6. Medical Record Technicians

Civil Service Rating Required 2.6

Accreditation of A.A.M.R.L. Required 9

Local or Regional Licensing Required 2

7. Background of present Medical Record Technicians

Average for:	Total	New York
High School Graduates Only	50.48%	44.44%
Less than 2 Years Post High School	25.49%	
Two-Year College Graduates	17.65%	
Four-Year College Graduates and Above	4.38%	

8. Average length of retention of Medical Record Technicians on the job (in month)

Male	10.25
Female	51.75

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	
Machine Shorthand	
Typing	
Medical Terminology	
Anat. and Physiol.	
Accounting	
Filing	
Data Processing	
Business Law	
Mathematics	
Machine Duplication	
Office Machines	

10. Presently Employed 1970 Presently Employed 1970

X Ray Technicians	112	125	Biomedical Engineering Tech.	
Occupational Therapy Asst.	87	112	(operating, maintaining, trouble shooting and repairing Mechanical electrical and electronic Eqpt. and instruments used in medicine)	25
Medical Lab. Technician	208	218	Medical Emergency Tech (respond to emergency calls, evaluate the emergencies, take action to reduce the med. hazard to patients, accompany patients to receiving station, serve as tech. asst. to emergency room staff, asst. rescue personnel with rescue prodedures)	11
Medical Secretary	249	273	Public Health Tech (asst. sanitary engrs. scientists, physicians in public health services to gather data, inspect, evaluate public health facilities.	1
Surgery Technician ("Scrub" asst. prep. O.R., pass instruments, care for O.R. and equipment, "circulating" assistant, assist in pre and post surgery patient care, assist anesthesiologist, observe, record and report selected data associated with surgery.)	17	39	Med. Record Technicians	85
Inhalation Therapy Tech. (handle medical gases, use and maintain eqpt. associated with inhalation therapy, carry out physicians orders relating to inhalation therapy,	13	20	Dental Auxiliary Tech direct asst. to dentist)	28
Ophthalmic Dispensing Tech. (Optician)	1	3		52

CONTROL GROUP 13

1. How many Medical Record Librarians employed?

Total 17
 Male 1
 Female 9

Average
 Male 5.88%
 Female 52.94%

2. How many Medical Record Technicians employed?

Total 71
 Male
 Female 38

Average
 Male
 Female 53.52%

3. How many were contacted? 86

How many replied? 43

Percentage 50%

4. Number of Medical Record Technician positions anticipated to exist by:

1969 115 1975 113 Total

5. Starting Salary:

Lowest \$200-

Highest 457-

Average for Total Group \$292.04

Average for New York State \$345.25

Average for Each State

Alabama \$200-
 Alaska
 Arizona
 Arkansas \$275-
 California
 Colorado
 Connecticut
 Delaware
 Dist. of Columbia
 Florida \$275-
 Georgia
 Hawaii \$457-
 Idaho \$300-
 Illinois
 Indiana \$272-
 Iowa \$400-
 Kansas

Kentucky
 Louisiana
 Maine
 Maryland \$346-
 Massachusetts
 Michigan
 Minnesota
 Mississippi \$230-
 Missouri
 Montana
 Nebraska
 Nevada \$362.50
 New Hampshire
 New Jersey
 New Mexico
 New York
 North Carolina

North Dakota
 Ohio
 Oklahoma \$250-
 Oregon
 Pennsylvania
 Rhode Island
 South Carolina \$200-
 South Dakota
 Tennessee \$265-
 Texas \$275-
 Utah \$230-
 Vermont
 Virginia
 Washington
 West Virginia \$225-
 Wisconsin
 Wyoming \$265-

6. Medical Record Technicians

Civil Service Rating Required 6

Accreditation of A.A.M.R.L. Required 7

Local or Regional Licensing Required 2

7. Background of present Medical Record Technicians

Average for:	Total	New York
High School Graduates Only	<u>44.186</u> %	<u>50</u> %
Less than 2 Years Post High School	<u>44.186</u> %	<u>33.33</u> %
Two-Year College Graduates	<u>9.3</u> %	-
Four-Year College Graduates and Above	<u>13.95</u> %	<u>33.33</u> %

8. Average length of retention of Medical Record Technicians on the job (in month)

Male	<u>54</u>
Female	<u>43.23</u>

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines	_____

	Presently Employed	1970		Presently Employed	1970
X-Ray Technicians	<u>132</u>	<u>152</u>	Biomedical Engineering Techn.		
Occupational Therapy Asst.	<u>16</u>	<u>35</u>	(operating, maintaining, trouble shooting and repairing Mechanical electrical and electronic Eqpt. and instruments used in medicine)	<u>12</u>	
Medical Lab. Technician	<u>320</u>	<u>411</u>	Medical Emergency Tech (respond to emergency calls, evaluate the emergencies, take action to reduce the med. hazard to patients, accompany patients to receiving station, serve as tech. asst. to emergency room staff, asst. rescue personnel with rescue prodedures)	<u>18</u>	<u>24</u>
Medical Secretary	<u>135</u>	<u>202</u>			
Surgery Technician ("Scrub" asst. prep. O.R., pass instruments, care for O.R. and equipment, "circulating" assistant, assist in pre and post surgery patient care, assist anesthesiologist, observe, record and report selected data associated with surgery.)	<u>99</u>	<u>144</u>	Public Health Tech (asst. sanitary engrs. scientists, physicians in public health services to gather data, inspect, evaluate public health facilities.		
Inhalation Therapy Tech. (handle medical gases, use and maintain eqpt. associated with inhalation therapy, carry out physicians orders relating to inhalation therapy,	<u>27</u>	<u>65</u>	Med. Record Technicians	<u>59</u>	<u>97</u>
Ophthalmic Dispensing Tech. (Optician)			Dental Auxiliary Tech direct asst. to dentist)	<u>2</u>	<u>4</u>

CONTROL GROUP 14

1. How many Medical Record Librarians employed?

Total	<u>15</u>	Average	
Male	<u>2</u>	Male	<u>13.33%</u>
Female	<u>10</u>	Female	<u>66.66%</u>

2. How many Medical Record Technicians employed?

Total	<u>106</u>	Average	
Male	<u>10</u>	Male	<u>9.43%</u>
Female	<u>64</u>	Female	<u>60.37%</u>

3. How many were contacted? 59

How many replied? 20

Percentage 33.9%

4. Number of Medical Record Technician positions anticipated to exist by:

1969	<u>125</u>	1975	<u>160</u>	Total	<u> </u>
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5. Starting Salary:

Lowest \$217-

Highest \$500-

Average for Total Group \$338.19

Average for New York State 391.43

Average for Each State

Alabama	<u> </u>	Kentucky	<u> </u>	North Dakota	<u> </u>
Alaska	<u> </u>	Louisiana	<u> </u>	Ohio	<u>\$217.-</u>
Arizona	<u> </u>	Maine	<u>\$242.-</u>	Oklahoma	<u>\$350.-</u>
Arkansas	<u> </u>	Maryland	<u>\$391.-</u>	Oregon	<u> </u>
California	<u> </u>	Massachusetts	<u>\$303.-</u>	Pennsylvania	<u> </u>
Colorado	<u> </u>	Michigan	<u> </u>	Rhode Island	<u> </u>
Connecticut	<u> </u>	Minnesota	<u> </u>	South Carolina	<u> </u>
Delaware	<u> </u>	Mississippi	<u> </u>	South Dakota	<u> </u>
Dist. of Columbia	<u> </u>	Missouri	<u> </u>	Tennessee	<u> </u>
Florida	<u> </u>	Montana	<u> </u>	Texas	<u> </u>
Georgia	<u> </u>	Nebraska	<u> </u>	Utah	<u> </u>
Hawaii	<u> </u>	Nevada	<u> </u>	Vermont	<u> </u>
Idaho	<u> </u>	New Hampshire	<u> </u>	Virginia	<u> </u>
Illinois	<u> </u>	New Jersey	<u>\$300.-</u>	Washington	<u> </u>
Indiana	<u> </u>	New Mexico	<u> </u>	West Virginia	<u> </u>
Iowa	<u> </u>	New York	<u> </u>	Wisconsin	<u> </u>
Kansas	<u>\$282.50</u>	North Carolina	<u> </u>	Wyoming	<u> </u>

6. Medical Record Technicians
Civil Service Rating Required 2

Accreditation of A.A.M.R.L. Required 3

Local or Regional Licensing Required 2

7. Background of present Medical Record Technicians

Average for:	Total	New York
High School Graduates Only	<u>60%</u>	<u>62.5%</u>
Less than 2 Years Post High School	<u>45%</u>	<u>62.5%</u>
Two-Year College Graduate	<u>30%</u>	<u>50.0%</u>
Four-Year College Graduates and Above	<u>25%</u>	<u>25.0%</u>

8. Average length of retention of Medical Record Technicians on the job (1. month)

Male	<u>15.5</u>
Female	<u>47.31</u>

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines.	_____

10. Presently Employed 1970 Presently Employed 1970

X-Ray Technicians	<u>82</u>	<u>99</u>	Biomedical Engineering Tech.	
Occupational Therapy Asst.	<u>10</u>	<u>37</u>	(operating, maintaining, trouble shooting and repairing Mechanical electrical and electronic Eqpt. and instruments used in medicine)	<u>16</u>
Medical Lab. Technician	<u>287</u>	<u>382</u>	Medical Emergency Tech (respond to emergency calls, evaluate the emergencies, take action to reduce the med. hazard to patients, accompany patients to receiving station, serve as tech. asst. to emergency room staff, asst. rescue personnel with rescue prodedures)	<u>1</u>
Medical Secretary	<u>137</u>	<u>213</u>		
Surgery Technician ("Scrub" asst. prep. O.R., pass instruments, care for O.R. and equipment, "circulating" assistant, assist in pre and post surgery patient care, assist anesthesiologist, observe, record and report selected data associated with surgery.)	<u>35</u>	<u>76</u>	Public Health Tech (asst. sanitary engrs. scientists, physicians in public health services to gather data, inspect, evaluate public health facilities.	<u>2</u>
Inhalation Therapy Tech. (handle medical gases, use and maintain eqpt. associated with inhalation therapy, carry out physicians orders relating to inhalation therapy,	<u>19</u>	<u>37</u>	Med. Record Technicians	<u>47</u>
Ophthalmic Dispensing Tech. (Optician)			Dental Auxiliary Tech. direct asst. to dentist)	<u>6</u>
				<u>27</u>
				<u>20</u>

1. How many Medical Record Librarians employed?

Total	<u>1</u>	Average	<u> </u>
Male	<u> </u>	Male	<u> </u>
Female	<u>1</u>	Female	<u>100%</u>

2. How many Medical Record Technicians employed?

Total	<u>5</u>	Average	<u> </u>
Male	<u> </u>	Male	<u> </u>
Female	<u>1</u>	Female	<u>20%</u>

3. How many were contacted? 13

How many replied? 3

Percentage 23.07%

4. Number of Medical Record Technician positions anticipated to exist by:

1969	<u>9</u>	1975	<u>14</u>	Total	<u> </u>
------	----------	------	-----------	-------	-------------------

5. Starting Salary:

Lowest \$ 200.-

Highest \$ 398.-

Average for Total Group \$ 299.-

Average for New York State

Average for Each State

Alabama	<u>\$ 200-</u>	Kentucky	<u> </u>	North Dakota	<u> </u>
Alaska	<u> </u>	Louisiana	<u> </u>	Ohio	<u> </u>
Arizona	<u> </u>	Maine	<u> </u>	Oklahoma	<u> </u>
Arkansas	<u> </u>	Maryland	<u> </u>	Oregon	<u> </u>
California	<u> </u>	Massachusetts	<u> </u>	Pennsylvania	<u> </u>
Colorado	<u> </u>	Michigan	<u> </u>	Rhode Island	<u> </u>
Connecticut	<u> </u>	Minnesota	<u> </u>	South Carolina	<u> </u>
Delaware	<u> </u>	Mississippi	<u> </u>	South Dakota	<u> </u>
Dist. of Columbia	<u> </u>	Missouri	<u> </u>	Tennessee	<u> </u>
Florida	<u> </u>	Montana	<u> </u>	Texas	<u> </u>
Georgia	<u> </u>	Nebraska	<u> </u>	Utah	<u> </u>
Hawaii	<u>\$ 398-</u>	Nevada	<u> </u>	Vermont	<u> </u>
Idaho	<u> </u>	New Hampshire	<u> </u>	Virginia	<u> </u>
Illinois	<u> </u>	New Jersey	<u> </u>	Washington	<u> </u>
Indiana	<u> </u>	New Mexico	<u> </u>	West Virginia	<u> </u>
Iowa	<u> </u>	New York	<u> </u>	Wisconsin	<u> </u>
Kansas	<u> </u>	North Carolina	<u> </u>	Wyoming	<u> </u>

6. Medical Record Technicians

Civil Service Rating Required 0

Accreditation of A.A.M.R.L. Required 2

Local or Regional Licensing Required 0

7. Background of present Medical Record Technicians

Average for:	Total	New York
High School Graduates Only	<u>100%</u>	_____
Less than 2 Years Post High School	<u>33.33%</u>	_____
Two-Year College Graduates	_____	_____
Four-Year College Graduates and Above	_____	_____

8. Average length of retention of Medical Record Technicians on the job (in month)

Male _____
 Female 30

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines	_____

10. Presently Employed 1970 Presently Employed 1970

X-Ray Technicians	<u>12</u>	<u>13</u>	Biomedical Engineering Tech.	_____	_____
Occupational Therapy Asst.	<u>1</u>	<u>3</u>	(operating, maintaining, trouble shooting and repairing Mechanical electrical and electronic Eqpt. and instruments used in medicine)	_____	<u>1</u>
Medical Lab. Technician	<u>47</u>	<u>54</u>	Medical Emergency Tech (respond to emergency calls, evaluate the emergencies, take action to reduce the med. hazard to patients, accompany patients to receiving station, serve as tech. asst. to emergency room staff, asst. rescue personnel with rescue prodedures)	_____	_____
Medical Secretary	<u>8</u>	<u>14</u>	Public Health Tech (asst. sanitary engrs. scientists, physicians in public health services to gather data, inspect, evaluate public health facilities.	_____	_____
Surgery Technician ("Scrub" asst. prep. O.R., pass instruments, care for O.R. and equipment, "circulating" assistant, assist in pre and post surgery patient care, assist anesthesiologist, observe, record and report selected data associated with surgery.)	<u>12</u>	<u>14</u>	Med. Record Technicians	<u>4</u>	<u>10</u>
Inhalation Therapy Tech. (handle medical gases, use and maintain eqpt. associated with inhalation therapy, carry out physicians orders relating to inhalation therapy,	_____	<u>1</u>	Dental Auxiliary Tech direct asst. to dentist)	<u>2</u>	<u>2</u>
Ophthalmic Dispensing Tech. (Optician)	_____	_____			

CONTROL GROUP 16

1. How many Medical Record Librarians employed?

Total	<u>4</u>	Average	_____
Male	_____	Male	_____
Female	<u>1</u>	Female	<u>25%</u>

2. How many Medical Record Technicians employed?

Total	<u>7</u>	Average	_____
Male	_____	Male	_____
Female	<u>5</u>	Female	<u>71.24%</u>

3. How many were contacted? 16

How many replied? 3

Percentage 18.75%

4. Number of Medical Record Technician positions anticipated to exist by:

1969	<u>14</u>	1975	<u>16</u>	Total	_____
------	-----------	------	-----------	-------	-------

5. Starting Salary:

Lowest \$ 250-

Highest \$ 350-

Average for Total Group \$ 300-

Average for New York State _____

Average for Each State _____

- | | | |
|--------------------------|----------------------|----------------------|
| Alabama _____ | Kentucky _____ | North Dakota _____ |
| Alaska _____ | Louisiana _____ | Ohio _____ |
| Arizona _____ | Maine _____ | Oklahoma _____ |
| Arkansas _____ | Maryland _____ | Oregon _____ |
| California _____ | Massachusetts _____ | Pennsylvania _____ |
| Colorado <u>\$ 350.-</u> | Michigan _____ | Rhode Island _____ |
| Connecticut _____ | Minnesota _____ | South Carolina _____ |
| Delaware _____ | Mississippi _____ | South Dakota _____ |
| Dist. of Columbia _____ | Missouri _____ | Tennessee _____ |
| Florida <u>\$ 250-</u> | Montana _____ | Texas _____ |
| Georgia _____ | Nebraska _____ | Utah _____ |
| Hawaii _____ | Nevada _____ | Vermont _____ |
| Idaho _____ | New Hampshire _____ | Virginia _____ |
| Illinois _____ | New Jersey _____ | Washington _____ |
| Indiana _____ | New Mexico _____ | West Virginia _____ |
| Iowa _____ | New York _____ | Wisconsin _____ |
| Kansas _____ | North Carolina _____ | Wyoming _____ |

6. Medical Record Technicians
Civil Service Rating Required 0

Accreditation of A.A.M.R.L. Required 1

Local or Regional Licensing Required 0

7. Background of present Medical Record Technicians

<u>Average for:</u>	<u>Total</u>	<u>New York</u>
High School Graduates Only	<u>33.33 %</u>	_____
Less than 2 Years Post High School	_____	_____
Two-Year College Graduates	_____	_____
Four-Year College Graduates and Above	<u>33.33 %</u>	_____

8. Average length of retention of Medical Record Technicians on the job (in month)

Male _____
 Female 61.5

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines	_____

10.	<u>Presently</u> <u>Employed</u>	<u>1970</u>		<u>Presently</u> <u>Employed</u>	<u>1970</u>
X-Ray Technicians	<u>15</u>	<u>19</u>	Biomedical Engineering Tech.	_____	_____
Occupational Therapy Asst.	<u>1</u>	<u>4</u>	(operating, maintaining, trouble	_____	_____
Medical Lab. Technician	<u>28</u>	<u>42</u>	shooting and repairing Mechanical	_____	_____
Medical Secretary	<u>8</u>	<u>17</u>	electrical and electronic Eqpt.	_____	_____
Surgery Technician ("Scrub"	_____	_____	and instruments used in medicine	_____	_____
asst. prep. O.R., pass	_____	_____	Medical Emergency Tech (respond	_____	_____
instruments, care for O.R.	_____	_____	to emergency calls, evaluate the	_____	_____
and equipment, "circulating"	_____	_____	emergencies, take action to reduce	_____	_____
assistant, assist in pre and	_____	_____	the med. hazard to patients,	_____	_____
post surgery patient care,	_____	_____	accompany patients to receiving	_____	_____
assist anesthesiologist,	_____	_____	station, serve as tech. asst. to	_____	_____
observe, record and report	_____	_____	emergency room staff, asst. rescue	_____	_____
selected data associated with	_____	_____	personnel with rescue prodedures)	_____	_____
surgery.)	<u>10</u>	<u>16</u>		_____	_____
Inhalation Therapy Tech. (handle	_____	_____	Public Health Tech (asst. sanitary	_____	_____
medical gases, use and maintain	_____	_____	engrs. scientists, physicians in	_____	_____
eqpt. associated with inhalation	_____	_____	public health services to gather	_____	_____
therapy, carry out physicians	_____	_____	data, inspect, evaluate public	_____	_____
orders relating to inhalation	_____	_____	health facilities.	_____	_____
therapy,	<u>2</u>	<u>6</u>	Med. Record Technicians	<u>2</u>	<u>3</u>
Ophthalmic Dispensing Tech.	_____	_____	Dental Auxiliary Tech direct	_____	_____
Optician)	_____	_____	asst. to dentist)	<u>2</u>	_____

CONTROL GROUP 21

1. How many Medical Record Librarians employed?

Total	<u>84</u>	Average	
Male	<u>3</u>	Male	<u>3.57%</u>
Female	<u>59</u>	Female	<u>70.23%</u>

2. How many Medical Record Technicians employed?

Total	<u>267</u>	Average	
Male	<u>3</u>	Male	<u>1.12%</u>
Female	<u>180</u>	Female	<u>67.415%</u>

3. How many were contacted? 213

How many replied? 103

Percentage 48.35%

4. Number of Medical Record Technician positions anticipated to exist by:

1969 338 1975 367 Total _____

5. Starting Salary:

Lowest \$167.-

Highest \$550.-

Average for Total Group \$310.-
 Average for New York State 368.375
 Average for Each State _____

Alabama	_____	Kentucky	_____	North Dakota	<u>\$281.-</u>
Alaska	<u>\$500.-</u>	Louisiana	<u>\$237.50</u>	Ohio	_____
Arizona	_____	Maine	<u>\$225.-</u>	Oklahoma	<u>\$300.-</u>
Arkansas	<u>\$275.-</u>	Maryland	<u>\$281.25</u>	Oregon	<u>\$319.-</u>
California	_____	Massachusetts	_____	Pennsylvania	_____
Colorado	_____	Michigan	<u>\$343.50</u>	Rhode Island	_____
Connecticut	<u>\$312.-</u>	Minnesota	_____	South Carolina	<u>\$240.-</u>
Delaware	_____	Mississippi	_____	South Dakota	<u>\$254.-</u>
Dist. of Columbia	_____	Missouri	<u>\$312.-</u>	Tennessee	_____
Florida	_____	Montana	<u>\$340.-</u>	Texas	<u>\$275.-</u>
Georgia	_____	Nebraska	<u>\$303.-</u>	Utah	<u>\$310.-</u>
Hawaii	_____	Nevada	<u>\$255.-</u>	Vermont	_____
Idaho	<u>\$289.66</u>	New Hampshire	_____	Virginia	_____
Illinois	<u>\$285.50</u>	New Jersey	_____	Washington	<u>\$294.50</u>
Indiana	_____	New Mexico	<u>\$268.-</u>	West Virginia	<u>\$233.50</u>
Iowa	<u>\$200.-</u>	New York	<u>\$368.37</u>	Wisconsin	<u>\$336.25</u>
Kansas	<u>\$217.-</u>	North Carolina	<u>\$225.-</u>	Wyoming	<u>\$275.-</u>

6. Medical Record Technicians:

Civil Service Rating Required 54.37% 2

Accreditation of A.A.M.R.L. Required 24

Local or Regional Licensing Required 2

7. Background of present Medical Record Technicians

Average for:

High School Graduates Only
 Less than 2 Years Post High School
 Two-Year College Graduates
 Four-Year College Graduates and Above

Total
54.37%
39.81%
15.53%
5.82%

New York
55%
35%
15%
5%

8. Average length of retention of Medical Record Technicians on the job (in month)

Male 32.8
 Female 44.9

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines	_____

10.

	<u>Presently</u> <u>Employed</u>	<u>1970</u>		<u>Presently</u> <u>Employed</u>	<u>1970</u>
X-Ray Technicians	<u>372</u>	<u>449</u>	Biomedical Engineering Tech.		
Occupational Therapy Asst.	<u>16</u>	<u>84</u>	(operating, maintaining, trouble		
Medical Lab. Technician	<u>697</u>	<u>833</u>	shooting and repairing Mechanical		
Medical Secretary	<u>296</u>	<u>474</u>	electrical and electronic Eqpt.		
Surgery Technician ("Scrub"			and instruments used in medicine	<u>21</u>	<u>25</u>
asst. prep. O.R., pass			Medical Emergency Tech (respond		
instruments, care for O.R.			to emergency calls, evaluate the		
and equipment, "circulating"			emergencies, take action to reduce		
assistant, assist in pre and			the med. hazard to patients,		
post surgery patient care,			accompany patients to receiving		
assist anesthesiologist,			tation, serve as tech. asst. to		
observe, record and report			emergency room staff, asst. rescue		
selected data associated with			personnel with rescue prodedures)	<u>40</u>	<u>84</u>
surgery.)	<u>243</u>	<u>372</u>			
Inhalation Therapy Tech. (handle			Public Health Tech (asst. sanitary		
medical gases, use and maintain			engrs. scientists, physicians in		
eqpt. associated with inhalation			public health services to gather		
therapy, carry out physicians			data, inspect, evaluate public		
orders relating to inhalation			health facilities.	<u>11</u>	<u>13</u>
therapy,	<u>111</u>	<u>191</u>	Med. Record Technicians	<u>182</u>	<u>282</u>
Ophthalmic Dispensing Tech.			Dental Auxiliary Tech direct		
(Optician)	<u>2</u>	<u>2</u>	asst. to dentist)	<u>10</u>	<u>14</u>

CONTROL GROUP 23

1. How many Medical Record Librarians employed?

Total 177
 Male 2
 Female 111

Average
 Male 1.129%
 Female 62.71%

2. How many Medical Record Technicians employed?

Total 595
 Male 2
 Female 355

Average
 Male 1.176%
 Female 59.66%

3. How many were contacted? 435

How many replied? 228

Percentage 52.41%

4. Number of Medical Record Technician positions anticipated to exist by:

1969 273 1975 946 Total _____

5. Starting Salary:

Lowest \$ 140.-

Highest \$ 505.-

Average for Total Group \$ 313.14

Average for New York State \$ 340.81

Average for Each State _____

Alabama \$ 300.-
 Alaska _____
 Arizona \$ 295.50
 Arkansas _____
 California _____
 Colorado \$ 350.-
 Connecticut 339.66
 Delaware \$ 236.-
 Dist. of Columbia _____
 Florida \$ 300.-
 Georgia \$ 300.-
 Hawaii \$ 370.-
 Idaho _____
 Illinois \$ 242.-
 Indiana _____
 Iowa _____
 Kansas _____

Kentucky \$ 292.50
 Louisiana \$ 230.-
 Maine \$ 257.18
 Maryland \$ 295.66
 Massachusetts 366.45
 Michigan _____
 Minnesota \$ 250.-
 Mississippi _____
 Missouri \$ 225.-
 Montana _____
 Nebraska _____
 Nevada _____
 New Hampshire \$ 313.50
 New Jersey _____
 New Mexico \$ 250.-
 New York _____
 North Carolina \$ 302.50

North Dakota \$ 260.-
 Ohio \$ 235.-
 Oklahoma \$ 270.-
 Oregon \$ 345.-
 Pennsylvania \$ 295.64
 Rhode Island \$ 352.66
 South Carolina \$ 234.-
 South Dakota \$ 210.-
 Tennessee _____
 Texas _____
 Utah _____
 Vermont \$ 308.17
 Virginia \$ 294.17
 Washington _____
 West Virginia _____
 Wisconsin _____
 Wyoming _____

6. Medical Record Technicians

Civil Service Rating Required 12

Accreditation of A.A.M.R.L. Required 47

Local or Regional Licensing Required 11

7. Background of present Medical Record Technicians.

<u>Average for:</u>	<u>Total</u>	<u>New York</u>
High School Graduates Only	<u>60.96</u> %	<u>59.22</u> %
Less than 2 Years Post High School	<u>31.14</u> %	<u>33.33</u> %
Two-Year College Graduates	<u>21.05</u> %	<u>18.05</u> %
Four-Year College Graduates and Above	<u>10.09</u> %	<u>15.22</u> %

8. Average length of retention of Medical Record Technicians on the job (in month)

Male	<u>65.5</u>
Female	<u>50.9</u>

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines	_____

10.

Presently 1970
Employed

Presently 1970
Employed

X-Ray Technicians	<u>952</u>	<u>1130</u>	Biomedical Engineering Tech.	
Occupational Therapy Asst.	<u>96</u>	<u>216</u>	(operating, maintaining, trouble	
Medical Lab. Technician	<u>2143</u>	<u>2637</u>	shooting and repairing Mechanical	
Medical Secretary	<u>1006</u>	<u>1390</u>	electrical and electronic Eqpt.	
Surgery Technician ("Scrub" asst. prep. O.R., pass instruments, care for O.R. and equipment, "circulating" assistant, assist in pre and post surgery patient care, assist anesthesiologist, observe, record and report selected data associated with surgery.)	<u>583</u>	<u>914</u>	and instruments used in medicine	<u>53</u> <u>159</u>
Inhalation Therapy Tech. (handle medical gases, use and maintain eqpt. associated with inhalation therapy, carry out physicians orders relating to inhalation therapy.)	<u>210</u>	<u>416</u>	Medical Emergency Tech (respond to emergency calls, evaluate the emergencies, take action to reduce the med. hazard to patients, accompany patients to receiving station, serve as tech. asst. to emergency room staff, asst. rescue personnel with rescue prodedures)	<u>66</u> <u>197</u>
Ophthalmic Dispensing Tech. (Optician)	<u>3</u>	<u>11</u>	Public Health Tech (asst. sanitary engrs. scientists, physicians in public health services to gather data, inspect, evaluate public health facilities.)	<u>8</u> <u>24</u>
			Med. Record Technicians	<u>417</u> <u>692</u>
			Dental Auxiliary Tech direct asst. to dentist)	<u>44</u> <u>71</u>

1. How many Medical Record Librarians employed?

Total 2
Male _____
Female 2

Average _____
Male _____
Female 100%

2. How many Medical Record Technicians employed?

Total 1
Male _____
Female 1

Average _____
Male _____
Female 100%

3. How many were contacted? 4

How many replied? 2

Percentage 50%

4. Number of Medical Record Technician positions anticipated to exist by:

1969 5 1975 10 Total _____

5. Starting Salary:

Lowest \$ 368.-

Highest \$ 368.-

Average for Total Group \$ 368.-
Average for New York State \$ 368.-
Average for Each State _____

Alabama _____
Alaska _____
Arizona _____
Arkansas _____
California _____
Colorado _____
Connecticut _____
Delaware _____
Dist. of Columbia _____
Florida _____
Georgia _____
Hawaii _____
Idaho _____
Illinois _____
Indiana _____
Iowa _____
Kansas _____

Kentucky _____
Louisiana _____
Maine _____
Maryland _____
Massachusetts _____
Michigan _____
Minnesota _____
Mississippi _____
Missouri _____
Montana _____
Nebraska _____
Nevada _____
New Hampshire _____
New Jersey _____
New Mexico _____
New York _____
North Carolina _____

North Dakota _____
Ohio _____
Oklahoma _____
Oregon _____
Pennsylvania _____
Rhode Island _____
South Carolina _____
South Dakota _____
Tennessee _____
Texas _____
Utah _____
Vermont _____
Virginia _____
Washington _____
West Virginia _____
Wisconsin _____
Wyoming _____

6. Medical Record Technicians

Civil Service Rating Required 0

Accreditation of A.A.M.R.L. Required 1

Local or Regional Licensing Required 0

7. Background of present Medical Record Technicians

<u>Average for:</u>	<u>Total</u>	<u>New York</u>
High School Graduates Only	<u>50%</u>	<u>50%</u>
Less than 2 Years Post High School	<u>-</u>	<u>-</u>
Two-Year College Graduates	<u>-</u>	<u>-</u>
Four-Year College Graduates and Above	<u>-</u>	<u>-</u>

8. Average length of retention of Medical Record Technicians on the job (in month)

Male	<u>-</u>
Female	<u>48</u>

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines	_____

10. Presently Employed 1970 Presently Employed 1970

X-Ray Technicians	<u>17</u>	<u>9</u>	Biomedical Engineering Tech.	<u>-</u>	<u>-</u>
Occupational Therapy Asst.	<u>1</u>	<u>-</u>	(operating, maintaining, trouble shooting and repairing Mechanical electrical and electronic Eqpt. and instruments used in medicine)	<u>2</u>	<u>5</u>
Medical Lab. Technician	<u>85</u>	<u>75</u>	Medical Emergency Tech (respond to emergency calls, evaluate the emergencies, take action to reduce the med. hazard to patients, accompany patients to receiving station, serve as tech. asst. to emergency room staff, asst. rescue personnel with rescue prodedures)	<u>3</u>	<u>-</u>
Medical Secretary	<u>4</u>	<u>6</u>	Public Health Tech (asst. sanitary engrs. scientists, physicians in public health services to gather data, inspect, evaluate public health facilities.	<u>-</u>	<u>-</u>
Surgery Technician ("Scrub" asst. prep. O.R., pass instruments, care for O.R. and equipment, "circulating" assistant, assist in pre and post surgery patient care, assist anesthesiologist, observe, record and report selected data associated with surgery.)	<u>18</u>	<u>9</u>	Med. Record Technicians	<u>1</u>	<u>-</u>
Inhalation Therapy Tech. (handle medical gases, use and maintain eqpt. associated with inhalation therapy, carry out physicians orders relating to inhalation therapy,	<u>12</u>	<u>9</u>	Dental Auxiliary Tech direct asst. to dentist)	<u>1</u>	<u>2</u>
Ophthalmic Dispensing Tech. (Optician)	<u>-</u>	<u>-</u>			

1. How many Medical Record Librarians employed?

Total	<u>6</u>	Average	_____
Male	_____	Male	_____
Female	<u>3</u>	Female	<u>50.7%</u>

2. How many Medical Record Technicians employed?

Total	<u>21</u>	Average	_____
Male	<u>1</u>	Male	<u>4.76%</u>
Female	<u>14</u>	Female	<u>66.66%</u>

3. How many were contacted? 22

How many replied? 9

Percentage 40.9%

4. Number of Medical Record Technician positions anticipated to exist by:

1969	<u>26</u>	1975	<u>39</u>	Total	_____
------	-----------	------	-----------	-------	-------

5. Starting Salary:

Lowest \$ 325.-

Highest \$ 399.-

Average for Total Group \$ 362.57

Average for New York State 362.57

Average for Each State _____

- | | | | | | |
|-------------------|-------|----------------|-------|----------------|-------|
| Alabama | _____ | Kentucky | _____ | North Dakota | _____ |
| Alaska | _____ | Louisiana | _____ | Ohio | _____ |
| Arizona | _____ | Maine | _____ | Oklahoma | _____ |
| Arkansas | _____ | Maryland | _____ | Oregon | _____ |
| California | _____ | Massachusetts | _____ | Pennsylvania | _____ |
| Colorado | _____ | Michigan | _____ | Rhode Island | _____ |
| Connecticut | _____ | Minnesota | _____ | South Carolina | _____ |
| Delaware | _____ | Mississippi | _____ | South Dakota | _____ |
| Dist. of Columbia | _____ | Missouri | _____ | Tennessee | _____ |
| Florida | _____ | Montana | _____ | Texas | _____ |
| Georgia | _____ | Nebraska | _____ | Utah | _____ |
| Hawaii | _____ | Nevada | _____ | Vermont | _____ |
| Idaho | _____ | New Hampshire | _____ | Virginia | _____ |
| Illinois | _____ | New Jersey | _____ | Washington | _____ |
| Indiana | _____ | New Mexico | _____ | West Virginia | _____ |
| Iowa | _____ | New York | _____ | Wisconsin | _____ |
| Kansas | _____ | North Carolina | _____ | Wyoming | _____ |

6. Medical Record Technicians:

Civil Service Rating Required 2

Accreditation of A.A.M.R.L. Required 3

Local or Regional Licensing Required 0

7. Background of present Medical Record Technicians

Average for:	Total	New York
High School Graduates Only	<u>22.22</u> %	<u>22.22</u> %
Less than 2 Years Post High School	<u>55.55</u> %	<u>55.55</u> %
Two-Year College Graduates	<u>33.33</u> %	<u>33.33</u> %
Four-Year College Graduates and Above	—	—

8. Average length of retention of Medical Record Technicians on the job (in month)

Male	<u>58.5</u>
Female	<u>40</u>

9. College courses desirable for Med. Record Tech. Total

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines	_____

	Presently Employed	1970		Presently Employed	1970
X-Ray Technicians	<u>43</u>	<u>52</u>	Biomedical Engineering Tech.		
Occupational Therapy Asst.	<u>4</u>	<u>13</u>	(operating, maintaining, trouble shooting and repairing Mechanical electrical and electronic Eqpt. and instruments used in medicine)	<u>6</u>	
Medical Lab. Technician	<u>142</u>	<u>176</u>	Medical Emergency Tech (respond to emergency calls, evaluate the emergencies, take action to reduce the med. hazard to patients, accompany patients to receiving station, serve as tech. asst. to emergency room staff, asst. rescue personnel with rescue prodedures)	<u>4</u>	<u>14</u>
Medical Secretary	<u>59</u>	<u>84</u>			
Surgery Technician ("Scrub" asst. prep. O.R., pass instruments, care for O.R. and equipment, "circulating" assistant, assist in pre and post surgery patient care, assist anesthesiologist, observe, record and report selected data associated with surgery.)	<u>25</u>	<u>52</u>	Public Health Tech (asst. sanitary engrs. scientists, physicians in public health services to gather data, inspect, evaluate public health facilities.		<u>2</u>
Inhalation Therapy Tech. (handle medical gases, use and maintain eqpt. associated with inhalation therapy, carry out physicians orders relating to inhalation therapy,	<u>19</u>	<u>31</u>	Med. Record Technicians	<u>22</u>	<u>30</u>
Ophthalmic Dispensing Tech. (Optician)			Dental Auxiliary Tech direct asst. to dentist)	<u>9</u>	<u>12</u>

1. How many Medical Record Librarians employed?

Total	<u>17</u>	Average	_____
Male	_____	Male	_____
Female	<u>2</u>	Female	<u>11.76%</u>

2. How many Medical Record Technicians employed?

Total	<u>47</u>	Average	_____
Male	_____	Male	_____
Female	<u>4</u>	Female	<u>8.51%</u>

3. How many were contacted? 40

How many replied? 13

Percentage 32.5%

4. Number of Medical Record Technician positions anticipated to exist by:

1969	<u>33</u>	1975	<u>45</u>	Total	_____
------	-----------	------	-----------	-------	-------

5. Starting Salary:

Lowest \$300.00

Highest \$541.-

Average for Total Group	<u>\$374.33</u>
Average for New York State	<u>\$419.60</u>
Average for Each State	_____

Alabama	_____	Kentucky	_____	North Dakota	_____
Alaska	_____	Louisiana	_____	Ohio	<u>\$300.00</u>
Arizona	_____	Maine	_____	Oklahoma	_____
Arkansas	_____	Maryland	_____	Oregon	_____
California	_____	Massachusetts	<u>\$335.50</u>	Pennsylvania	_____
Colorado	_____	Michigan	_____	Rhode Island	_____
Connecticut	_____	Minnesota	_____	South Carolina	_____
Delaware	_____	Mississippi	_____	South Dakota	_____
Dist. of Columbia	_____	Missouri	_____	Tennessee	_____
Florida	_____	Montana	_____	Texas	<u>\$300.-</u>
Georgia	_____	Nebraska	_____	Utah	_____
Hawaii	_____	Nevada	_____	Vermont	_____
Idaho	_____	New Hampshire	_____	Virginia	_____
Illinois	_____	New Jersey	_____	Washington	_____
Indiana	_____	New Mexico	_____	West Virginia	_____
Iowa	_____	New York	_____	Wisconsin	_____
Kansas	_____	North Carolina	_____	Wyoming	_____

6. Medical Record Technicians

Civil Service Rating Required 1

Accreditation of A.A.M.R.L. Required 4

Local or Regional Licensing Required 1

7. Background of present Medical Record Technicians

Average for:	Total	New York	%
High School Graduates Only	<u>38.46%</u>	<u>33.33</u>	70
Less than 2 Years Post High School	<u>15.3%</u>	<u>16.66</u>	70
Two-Year College Graduates	<u>21.07%</u>	<u>16.66</u>	70
Four-Year College Graduates and Above	<u>15.3%</u>	<u>16.66</u>	70

8. Average length of retention of Medical Record Technicians on the job (in month)

Male	<u>34.3</u>
Female	<u>42.7</u>

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines	_____

10.	Presently Employed	1970	Presently Employed	1970
X-Ray Technicians	<u>35</u>	<u>47</u>	Biomedical Engineering Tech.	
Occupational Therapy Asst.	<u>6</u>	<u>16</u>	(operating, maintaining, trouble shooting and repairing Mechanical electrical and electronic Eqpt. and instruments used in medicine)	<u>3</u> <u>8</u>
Medical Lab. Technician	<u>79</u>	<u>93</u>	Medical Emergency Tech (respond to emergency calls, evaluate the emergencies, take action to reduce the med. hazard to patients, accompany patients to receiving station, serve as tech. asst. to emergency room staff, asst. rescue personnel with rescue prodedures)	<u>20</u> <u>25</u>
Medical Secretary	<u>47</u>	<u>70</u>	Public Health Tech (asst. sanitary engrs. scientists, physicians in public health services to gather data, inspect, evaluate public health facilities.	<u>-</u> <u>2</u>
Surgery Technician ("Scrub" asst. prep. O.R., pass instruments, care for O.R. and equipment, "circulating" assistant, assist in pre and post surgery patient care, assist anesthesiologist, observe, record and report selected data associated with surgery.)	<u>37</u>	<u>52</u>	Med. Record Technicians	<u>17</u> <u>35</u>
Inhalation Therapy Tech. (handle medical gases, use and maintain eqpt. associated with inhalation therapy, carry out physicians orders relating to inhalation therapy,	<u>18</u>	<u>19</u>	Dental Auxiliary Tech direct asst. to dentist)	<u>2</u> <u>10</u>
Ophthalmic Dispensing Tech. (Optician)	<u>-</u>	<u>-</u>		

1. How many Medical Record Librarians employed?

Total	<u>2</u>	Average	_____
Male	_____	Male	_____
Female	<u>2</u>	Female	<u>100%</u>

2. How many Medical Record Technicians employed?

Total	<u>7</u>	Average	_____
Male	<u>3</u>	Male	<u>42.857%</u>
Female	<u>4</u>	Female	<u>57.14%</u>

3. How many were contacted? 6

How many replied? 2

Percentage 33.33%

4. Number of Medical Record Technician positions anticipated to exist by:

1969	<u>3</u>	1975	<u>5</u>	Total	_____
------	----------	------	----------	-------	-------

5. Starting Salary:

Lowest \$ 266.-

Highest \$ 266.-

Average for Total Group \$ 266
 Average for New York State _____
 Average for Each State _____

- | | | |
|-------------------------|----------------------|-----------------------|
| Alabama _____ | Kentucky _____ | North Dakota _____ |
| Alaska _____ | Louisiana _____ | Ohio _____ |
| Arizona _____ | Maine _____ | Oklahoma _____ |
| Arkansas _____ | Maryland _____ | Oregon _____ |
| California _____ | Massachusetts _____ | Pennsylvania _____ |
| Colorado _____ | Michigan _____ | Rhode Island _____ |
| Connecticut _____ | Minnesota _____ | South Carolina _____ |
| Delaware _____ | Mississippi _____ | South Dakota _____ |
| Dist. of Columbia _____ | Missouri _____ | Tennessee _____ |
| Florida _____ | Montana _____ | Texas <u>\$ 266.-</u> |
| Georgia _____ | Nebraska _____ | Utah _____ |
| Hawaii _____ | Nevada _____ | Vermont _____ |
| Idaho _____ | New Hampshire _____ | Virginia _____ |
| Illinois _____ | New Jersey _____ | Washington _____ |
| Indiana _____ | New Mexico _____ | West Virginia _____ |
| Iowa _____ | New York _____ | Wisconsin _____ |
| Kansas _____ | North Carolina _____ | Wyoming _____ |

6. Medical Record Technicians
 Civil Service Rating Required 1

Accreditation of A.A.M.R.L. Required 0
 Local or Regional Licensing Required 0

7. Background of present Medical Record Technicians

<u>Average for:</u>	<u>Total</u>	<u>New York</u>
High School Graduates Only	<u>100%</u>	_____
Less than 2 Years Post High School	<u>50%</u>	_____
Two-Year College Graduates	_____	_____
Four-Year College Graduates and Above	_____	_____

8. Average length of retention of Medical Record Technicians on the job (in month)

Male	<u>24</u>
Female	<u>36</u>

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines	_____

	<u>Presently</u>	<u>1970</u>		<u>Presently</u>	<u>1970</u>
	<u>Employed</u>			<u>Employed</u>	
X-Ray Technicians	<u>16</u>	<u>8</u>	Biomedical Engineering Tech.		
Occupational Therapy Asst.	<u>-</u>	<u>-</u>	(operating, maintaining, trouble		
Medical Lab. Technician	<u>23</u>	<u>14</u>	shooting and repairing Mechanical		
Medical Secretary	<u>21</u>	<u>1</u>	electrical and electronic Eqpt.		
Surgery Technician ("Scrub"			and instruments used in medicine	<u>5</u>	<u>4</u>
asst. prep. O.R., pass			Medical Emergency Tech (respond		
instruments, care for O.R.			to emergency calls, evaluate the		
and equipment, "circulating"			emergencies, take action to reduce		
assistant, assist in pre and			the med. hazard to patients,		
post surgery patient care,			accompany patients to receiving		
assist anesthesiologist,			station, serve as tech. asst. to		
observe, record and report			emergency room staff, asst. rescue		
selected data associated with			personnel with rescue prodedures)		
surgery.)	<u>18</u>	<u>9</u>		<u>14</u>	<u>9</u>
Inhalation Therapy Tech. (handle			Public Health Tech (asst. sanitary		
medical gases, use and maintain			engrs. scientists, physicians in		
eqpt. associated with inhalation			public health services to gather		
therapy, carry out physicians			data, inspect, evaluate public		
orders relating to inhalation			health facilities.	<u>15</u>	<u>9</u>
therapy,	<u>4</u>	<u>3</u>	Med. Record Technicians	<u>7</u>	<u>4</u>
Ophthalmic Dispensing Tech.			Dental Auxiliary Tech direct		
(Optician)	<u>1</u>	<u>-</u>	asst. to dentist)	<u>18</u>	<u>9</u>

1. How many Medical Record Librarians employed?

Total	<u>1</u>	Average	_____
Male	_____	Male	_____
Female	<u>1</u>	Female	<u>100%</u>

2. How many Medical Record Technicians employed?

Total	<u>6</u>	Average	_____
Male	_____	Male	_____
Female	<u>6</u>	Female	<u>100%</u>

3. How many were contacted? 8

How many replied? 1

Percentage 12.5%

4. Number of Medical Record Technician positions anticipated to exist by:

1969	<u>7</u>	1975	<u>8</u>	Total	_____
------	----------	------	----------	-------	-------

5. Starting Salary:

Lowest \$ 268.-

Highest \$ 268.-

Average for Total Group	<u>\$ 268.-</u>
Average for New York State	<u>\$ 268.-</u>
Average for Each State	_____

- Alabama _____
- Alaska _____
- Arizona _____
- Arkansas _____
- California _____
- Colorado _____
- Connecticut _____
- Delaware _____
- Dist. of Columbia _____
- Florida _____
- Georgia _____
- Hawaii _____
- Idaho _____
- Illinois _____
- Indiana _____
- Iowa _____
- Kansas _____

- Kentucky _____
- Louisiana _____
- Maine _____
- Maryland _____
- Massachusetts _____
- Michigan _____
- Minnesota _____
- Mississippi _____
- Missouri _____
- Montana _____
- Nebraska _____
- Nevada _____
- New Hampshire _____
- New Jersey _____
- New Mexico _____
- New York _____
- North Carolina _____

- North Dakota _____
- Ohio _____
- Oklahoma _____
- Oregon _____
- Pennsylvania _____
- Rhode Island _____
- South Carolina _____
- South Dakota _____
- Tennessee _____
- Texas _____
- Utah _____
- Vermont _____
- Virginia _____
- Washington _____
- West Virginia _____
- Wisconsin _____
- Wyoming _____

6. Medical Record Technicians
Civil Service Rating Required _____

Accreditation of A.A.M.R.L. Required _____
Local or Regional Licensing Required _____

7. Background of present Medical Record Technicians

<u>Average for:</u>	<u>Total</u>	<u>New York</u>
High School Graduates Only	<u>100%</u>	<u>100</u> %
Less than 2 Years Post High School	<u>100%</u>	<u>100</u> %
Two-Year College Graduates	<u>100%</u>	<u>100</u> %
Four-Year College Graduates and Above	_____	_____

8. Average length of retention of Medical Record Technicians on the job (in month)

Male	-
Female	<u>50</u> %

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines	_____

10.	<u>Presently</u> <u>Employed</u>	<u>1970</u>		<u>Presently</u> <u>Employed</u>	<u>1970</u>
X-Ray Technicians	<u>9</u>	<u>9</u>	Biomedical Engineering Tech.	_____	_____
Occupational Therapy Asst.	<u>-</u>	<u>-</u>	(operating, maintaining, trouble	_____	_____
Medical Lab. Technician	<u>2</u>	<u>3</u>	shooting and repairing Mechanical	_____	_____
Medical Secretary	<u>2</u>	<u>3</u>	electrical and electronic Eqpt.	_____	_____
Surgery Technician ("Scrub"	_____	_____	and instruments used in medicine	_____	_____
asst. prep. O.R., pass	_____	_____	Medical Emergency Tech (respond	_____	_____
instruments, care for O.R.	_____	_____	to emergency calls, evaluate the	_____	_____
and equipment, "circulating"	_____	_____	emergencies, take action to reduce	_____	_____
assistant, assist in pre and	_____	_____	the med. hazard to patients,	_____	_____
post surgery patient care,	_____	_____	accompany patients to receiving	_____	_____
assist anesthesiologist,	_____	_____	station, serve as tech. asst. to	_____	_____
observe, record and report	_____	_____	emergency room staff, asst. rescue	_____	_____
selected data associated with	_____	_____	personnel with rescue prodedures)	_____	_____
surgery.)	_____	_____		_____	_____
Inhalation Therapy Tech. (handle	_____	_____	Public Health Tech (asst. sanitary	_____	_____
medical gases, use and maintain	_____	_____	engrs. scientists, physicians in	_____	_____
eqpt. associated with inhalation	_____	_____	public health services to gather	_____	_____
therapy, carry out physicians	_____	_____	data, inspect, evaluate public	_____	_____
orders relating to inhalation	_____	_____	health facilities.	_____	_____
therapy,	_____	_____	Med. Record Technicians	<u>5</u>	<u>2</u>
Ophthalmic Dispensing Tech.	_____	_____	Dental Auxiliary Tech direct	_____	_____
Optician)	_____	_____	asst. to dentist)	_____	_____

1. How many Medical Record Librarians employed?

Total 2
Male _____
Female 2

Average _____
Male _____
Female 100%

2. How many Medical Record Technicians employed?

Total _____
Male _____
Female _____

Average _____
Male _____
Female _____

3. How many were contacted? 6

How many replied? 2

Percentage 3.33%

4. Number of Medical Record Technician positions anticipated to exist by:

1969 _____ 1975 _____ Total _____

5. Starting Salary:

Lowest _____

Highest _____

Average for Total Group _____
Average for New York State _____
Average for Each State _____

Alabama _____
Alaska _____
Arizona _____
Arkansas _____
California _____
Colorado _____
Connecticut _____
Delaware _____
Dist. of Columbia _____
Florida _____
Georgia _____
Hawaii _____
Idaho _____
Illinois _____
Indiana _____
Iowa _____
Kansas _____

Kentucky _____
Louisiana _____
Maine _____
Maryland _____
Massachusetts _____
Michigan _____
Minnesota _____
Mississippi _____
Missouri _____
Montana _____
Nebraska _____
Nevada _____
New Hampshire _____
New Jersey _____
New Mexico _____
New York _____
North Carolina _____

North Dakota _____
Ohio _____
Oklahoma _____
Oregon _____
Pennsylvania _____
Rhode Island _____
South Carolina _____
South Dakota _____
Tennessee _____
Texas _____
Utah _____
Vermont _____
Virginia _____
Washington _____
West Virginia _____
Wisconsin _____
Wyoming _____

6. Medical Record Technicians
Civil Service Rating Required _____

Accreditation of A.A.M.R.L. Required _____
Local or Regional Licensing Required _____

7. Background of present Medical Record Technicians

<u>Average for:</u>	<u>Total</u>	<u>New York</u>
High School Graduates Only	_____	_____
Less than 2 Years Post High School	_____	_____
Two-Year College Graduates	_____	_____
Four-Year College Graduates and Above	_____	_____

8. Average length of retention of Medical Record Technicians on the job (in month)

Male	_____
Female	_____

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____	_____
Machine Shorthand	_____	_____
Typing	_____	_____
Medical Terminology	_____	_____
Anat. and Physiol.	_____	_____
Accounting	_____	_____
Filing	_____	_____
Data Processing	_____	_____
Business Law	_____	_____
Mathematics	_____	_____
Machine Duplication	_____	_____
Office Machines	_____	_____

	<u>Presently</u> <u>Employed</u>	<u>1970</u>		<u>Presently</u> <u>Employed</u>	<u>1970</u>
X-Ray Technicians	_____	_____	Biomedical Engineering Tech.	_____	_____
Occupational Therapy Asst.	<u>1</u>	<u>1</u>	(operating, maintaining, trouble shooting and repairing Mechanical electrical and electronic Eqpt. and instruments used in medicine)	<u>3</u>	<u>3</u>
Medical Lab. Technician	<u>15</u>	<u>25</u>	Medical Emergency Tech (respond to emergency calls, evaluate the emergencies, take action to reduce the med. hazard to patients, accompany patients to receiving station, serve as tech. asst. to emergency room staff, asst. rescue personnel with rescue prodedures)	<u>9</u>	<u>9</u>
Medical Secretary	_____	_____			
Surgery Technician ("Scrub" asst. prep. O.R., pass instruments, care for O.R. and equipment, "circulating" assistant, assist in pre and post surgery patient care, assist anesthesiologist, observe, record and report selected data associated with surgery.)	_____	_____	Public Health Tech (asst. sanitary engrs. scientists, physicians in public health services to gather data, inspect, evaluate public health facilities.	<u>3</u>	<u>5</u>
Inhalation Therapy Tech. (handle medical gases, use and maintain eqpt. associated with inhalation therapy, carry out physicians orders relating to inhalation therapy.	<u>1</u>	<u>1</u>	Med. Record Technicians	_____	_____
Ophthalmic Dispensing Tech. (Optician)	_____	_____	Dental Auxiliary Tech direct asst. to dentist)	<u>4</u>	<u>7</u>

CONTROL GROUP

44

1. How many Medical Record Librarians employed?

Total	<u>5</u>
Male	<u>1</u>
Female	<u>3</u>

Average	_____
Male	<u>20%</u>
Female	<u>68.57%</u>

2. How many Medical Record Technicians employed?

Total	<u>3</u>
Male	_____
Female	<u>1</u>

Average	_____
Male	_____
Female	<u>33.33%</u>

3. How many were contacted? 12

How many replied? 2

Percentage 16.66%

4. Number of Medical Record Technician positions anticipated to exist by:

1969	<u>7</u>	1973	<u>10</u>	Total	_____
------	----------	------	-----------	-------	-------

5. Starting Salary:

Lowest \$ 377.-

Highest \$ 398.-

Average for Total Group \$ 387.50

Average for New York State \$ 377.-

Average for Each State _____

Alabama _____
 Alaska _____
 Arizona _____
 Arkansas _____
 California _____
 Colorado _____
 Connecticut _____
 Delaware _____
 Dist. of Columbia _____
 Florida _____
 Georgia _____
 Hawaii _____
 Idaho _____
 Illinois _____
 Indiana _____
 Iowa _____
 Kansas _____

Kentucky _____
 Louisiana _____
 Maine _____
 Maryland \$ 398.-
 Massachusetts _____
 Michigan _____
 Minnesota _____
 Mississippi _____
 Missouri _____
 Montana _____
 Nebraska _____
 Nevada _____
 New Hampshire _____
 New Jersey _____
 New Mexico _____
 New York _____
 North Carolina _____

North Dakota _____
 Ohio _____
 Oklahoma _____
 Oregon _____
 Pennsylvania _____
 Rhode Island _____
 South Carolina _____
 South Dakota _____
 Tennessee _____
 Texas _____
 Utah _____
 Vermont _____
 Virginia _____
 Washington _____
 West Virginia _____
 Wisconsin _____
 Wyoming _____

6. Medical Record Technicians

Civil Service Rating Required 1

Accreditation of A.A.M.R.L. Required 0

Local or Regional Licensing Required 0

7. Background of present Medical Record Technicians

Average for:	Total	New York
High School Graduates Only	<u>50%</u>	<u>100%</u>
Less than 2 Years Post High School	<u>100%</u>	<u>100%</u>
Two-Year College Graduates	<u>50%</u>	<u>100%</u>
Four-Year College Graduates and Above	<u>50%</u>	<u>100%</u>

8. Average length of retention of Medical Record Technicians on the job (in month)

Male	<u>1</u>
Female	<u>16.5%</u>

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines	_____

10. Presently Employed 1970 Presently Employed 1970

X-Ray Technicians	<u>7</u>	<u>13</u>	Biomedical Engineering Tech.	_____	_____
Occupational Therapy Asst.	<u>1</u>	<u>2</u>	(operating, maintaining, trouble shooting and repairing Mechanical electrical and electronic Eqpt. and instruments used in medicine)	<u>2</u>	_____
Medical Lab. Technician	<u>40</u>	<u>84</u>	Medical Emergency Tech (respond to emergency calls, evaluate the emergencies, take action to reduce the med. hazard to patients, accompany patients to receiving station, serve as tech. asst. to emergency room staff, asst. rescue personnel with rescue prodedures)	_____	_____
Medical Secretary	<u>18</u>	<u>26</u>	Public Health Tech (asst. sanitary engrs. scientists, physicians in public health services to gather data, inspect, evaluate public health facilities.	_____	_____
Surgery Technician ("Scrub" asst. prep. O.R., pass instruments, care for O.R. and equipment, "circulating" assistant, assist in pre and post surgery patient care, assist anesthesiologist, observe, record and report selected data associated with surgery.)	_____	<u>4</u>	Med. Record Technicians	<u>1</u>	<u>5</u>
Inhalation Therapy Tech. (handle medical gases, use and maintain eqpt. associated with inhalation therapy, carry out physicians orders relating to inhalation therapy.	_____	<u>3</u>	Dental Auxiliary Tech direct asst. to dentist)	<u>5</u>	<u>8</u>
Ophthalmic Dispensing Tech. (Optician)	_____	_____			

CONTROL GROUP 45

1. How many Medical Record Librarians employed?

Total	<u>8</u>	Average	
Male	<u>1</u>	Male	<u>12.5%</u>
Female	<u>5</u>	Female	<u>62.5%</u>

2. How many Medical Record Technicians employed?

Total	<u>17</u>	Average	
Male	<u>2</u>	Male	<u>11.76%</u>
Female	<u>7</u>	Female	<u>41.17%</u>

3. How many were contacted? 26

How many replied? 20

Percentage 76.92%

4. Number of Medical Record Technician positions anticipated to exist by:

1969 24 1975 26 Total _____

5. Starting Salary:
Lowest \$ 303.-

Highest \$ 444.-

Average for Total Group \$ 381.50
Average for New York State 340.50
Average for Each State _____

Alabama _____	Kentucky _____	North Dakota _____
Alaska _____	Louisiana _____	Ohio _____
Arizona _____	Maine _____	Oklahoma _____
Arkansas _____	Maryland <u>\$ 372.50</u>	Oregon _____
California _____	Massachusetts _____	Pennsylvania _____
Colorado _____	Michigan _____	Rhode Island <u>\$ 398.-</u>
Connecticut <u>\$ 421.-</u>	Minnesota _____	South Carolina _____
Delaware <u>\$ 444.-</u>	Mississippi _____	South Dakota _____
Dist. of Columbia _____	Missouri _____	Tennessee _____
Florida _____	Montana _____	Texas _____
Georgia _____	Nebraska _____	Utah _____
Hawaii _____	Nevada <u>\$ 387.-</u>	Vermont _____
Idaho <u>\$ 400.-</u>	New Hampshire _____	Virginia _____
Illinois _____	New Jersey _____	Washington _____
Indiana _____	New Mexico _____	West Virginia _____
Iowa _____	New York _____	Wisconsin _____
Kansas _____	North Carolina _____	Wyoming _____

6. Medical Record Technicians
Civil Service Rating Required 9

Accreditation of A.A.M.R.L. Required 2
Local or Regional Licensing Required _____

7. Background of present Medical Record Technicians

Average for:	Total	New York	%
High School Graduates Only	<u>26.31</u>	<u>33.33</u>	90
Less than 2 Years Post High School	<u>21.05</u>	<u>16.66</u>	90
Two-Year College Graduates	<u>26.31</u>	<u>33.33</u>	90
Four-Year College Graduates and Above	<u>5.26</u>	<u>16.66</u>	90

8. Average length of retention of Medical Record Technicians on the job (in month)

Male	<u>48</u>
Female	<u>54.75</u>

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines	_____

10. Presently Employed 1970 Presently Employed 1970

X-Ray Technicians	<u>81</u>	<u>75</u>	Biomedical Engineering Tech.	
Occupational Therapy Asst.	<u>20</u>	<u>27</u>	(operating, maintaining, trouble shooting and repairing Mechanical electrical and electronic Eqpt. and instruments used in medicine)	<u>12</u> <u>16</u>
Medical Lab. Technician	<u>185</u>	<u>202</u>	Medical Emergency Tech (respond to emergency calls, evaluate the emergencies, take action to reduce the med. hazard to patients, accompany patients to receiving station, serve as tech. asst. to emergency room staff, asst. rescue personnel with rescue prodedures)	<u>1</u> <u>2</u>
Medical Secretary	<u>184</u>	<u>142</u>	Public Health Tech (asst. sanitary engrs. scientists, physicians in public health services to gather data, inspect, evaluate public health facilities.	<u>1</u> <u>1</u>
Surgery Technician ("Scrub" asst. prep. O.R., pass instruments, care for O.R. and equipment, "circulating" assistant, assist in pre and post surgery patient care, assist anesthesiologist, observe, record and report selected data associated with surgery.)	<u>55</u>	<u>55</u>	Med. Record Technicians	<u>16</u> <u>28</u>
Inhalation Therapy Tech. (handle medical gases, use and maintain eqpt. associated with inhalation therapy, carry out physicians orders relating to inhalation therapy,	<u>9</u>	<u>21</u>	Dental Auxiliary Tech direct asst. to dentist)	<u>29</u> <u>19</u>
Ophthalmic Dispensing Tech. (Optician)	<u>1</u>	<u>-</u>		

CONTROL GROUP 46

1. How many Medical Record Librarians employed?

Total	_____	Average	_____
Male	_____	Male	_____
Female	_____	Female	_____

2. How many Medical Record Technicians employed?

Total	_____	Average	_____
Male	_____	Male	_____
Female	_____	Female	_____

3. How many were contacted? 3

How many replied? 1

Percentage 33.33%

4. Number of Medical Record Technician positions anticipated to exist by:

1969	_____	1975	_____	Total	_____
------	-------	------	-------	-------	-------

5. Starting Salary:

Lowest _____

Highest _____

Average for Total Group _____

Average for New York State _____

Average for Each State _____

Alabama _____
Alaska _____
Arizona _____
Arkansas _____
California _____
Colorado _____
Connecticut _____
Delaware _____
Dist. of Columbia _____
Florida _____
Georgia _____
Hawaii _____
Idaho _____
Illinois _____
Indiana _____
Iowa _____
Kansas _____

Kentucky _____
Louisiana _____
Maine _____
Maryland _____
Massachusetts _____
Michigan _____
Minnesota _____
Mississippi _____
Missouri _____
Montana _____
Nebraska _____
Nevada _____
New Hampshire _____
New Jersey _____
New Mexico _____
New York _____
North Carolina _____

North Dakota _____
Ohio _____
Oklahoma _____
Oregon _____
Pennsylvania _____
Rhode Island _____
South Carolina _____
South Dakota _____
Tennessee _____
Texas _____
Utah _____
Vermont _____
Virginia _____
Washington _____
West Virginia _____
Wisconsin _____
Wyoming _____

6. Medical Record Technicians

Civil Service Rating Required _____

Accreditation of A.A.M.R.L. Required _____

Local or Regional Licensing Required _____

7. Background of present Medical Record Technicians

<u>Average for:</u>	<u>Total</u>	<u>New York</u>
High School Graduates Only	_____	_____
Less than 2 Years Post High School	_____	_____
Two-Year College Graduates	_____	_____
Four-Year College Graduates and Above	_____	_____

8. Average length of retention of Medical Record Technicians on the job (in month)

Male _____
 Female _____

9. College courses desirable for Med. Record Tech. Total %

Manual Shorthand	_____
Machine Shorthand	_____
Typing	_____
Medical Terminology	_____
Anat. and Physiol.	_____
Accounting	_____
Filing	_____
Data Processing	_____
Business Law	_____
Mathematics	_____
Machine Duplication	_____
Office Machines	_____

10.

	<u>Presently</u> <u>Employed</u>	<u>1970</u>		<u>Presently</u> <u>Employed</u>	<u>1970</u>
X-Ray Technicians	_____	_____	Biomedical Engineering Tech.	_____	_____
Occupational Therapy Asst.	_____	_____	(operating, maintaining, trouble shooting and repairing Mechanical electrical and electronic Eqpt. and instruments used in medicine	_____	_____
Medical Lab. Technician	_____	_____	Medical Emergency Tech (respond to emergency calls, evaluate the emergencies, take action to reduce the med. hazard to patients, accompany patients to receiving station, serve as tech. asst. to emergency room staff, asst. rescue personnel with rescue prodedures)	_____	_____
Medical Secretary	_____	_____		_____	_____
Surgery Technician ("Scrub" asst. prep. O.R., pass instruments, care for O.R. and equipment, "circulating" assistant, assist in pre and post surgery patient care, assist anesthesiologist, observe, record and report selected data associated with surgery.)	_____	_____	Public Health Tech (asst. sanitary engrs. scientists, physicians in public health services to gather data, inspect, evaluate public health facilities.	_____	_____
Inhalation Therapy Tech. (handle medical gases, use and maintain eqpt. associated with inhalation therapy, carry out physicians orders relating to inhalation therapy,	_____	_____	Med. Record Technicians	_____	_____
Ophthalmic Dispensing Tech. (Optician)	_____	_____	Dental Auxiliary Tech direct asst. to dentist)	_____	_____

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Final Report: A COMPREHENSIVE PROJECT TO DEVELOP A COMPLETE CURRICULUM
IN THE AREA OF MEDICAL RECORDS TECHNICIAN. - Including Guidelines for the
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Health Technologies

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Medical Record Technology Pilot Program

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ABSTRACT

The study reports the national needs in the medical record field for personnel with two-year training in medical record technology as reported by 503 hospitals throughout the United States. In addition, these hospitals also indicated the types of courses which would be most beneficial to include in a collegiate curriculum for this type of education. A description of a pilot program in Alfred, New York, is given including the use of an "extended campus" of cooperating hospitals and a simulated medical record room on campus. Guidelines are included for the development of a two-year collegiate curriculum for Medical Record Technicians and are closely associated with those established by the Education and Registry Committee of the American Association of Medical Record Librarians. Course descriptions, objectives, and outlines for a two-year course in Medical Record Science are included. A description is given of the summer affiliation with hospitals that takes place between the first and second years, including the methods of evaluation used during this period.