Objectives of a 3-year articulation project were (1) to design and put into effect a curriculum for medical-record personnel which would provide educational progression for associate arts degree medical record technicians to baccalaureate degree medical record administration programs, (2) to research, classify, and compare curriculum content of the technician and administration programs, (3) to develop classroom and laboratory instructional materials, (4) to identify medical-record curriculum components compatible with other allied health curricula for development of core allied health courses, and (5) to inform those in the profession about the project and its relationship to their own programs. Project participants developed a plan with four major components: A consortium of medical record baccalaureate and associate arts degree programs in the northwest region, workshops, newsletters, and an advisory committee. The plan was to undertake the project at a regional level. The media included correspondence, research development of guidelines for use in gathering and comparing information, and making a comparative study of a local community college medical record technician program with the Seattle University program. Curriculum revision did result from the project and a curriculum ladder has been implemented at Seattle University (SU). Medical record technicians who have associate arts degrees can transfer into the program and receive full credit for 90 hours of their associate arts degree work plus approximately 10 credits towards the 45 credit hours of the professional health information curriculum at SU. (Appended to the project report is a paper on current and future directions in medical record curriculum.)
THE DESIGN & IMPLEMENTATION OF
A CURRICULUM LADDER IN MEDICAL RECORD ADMINISTRATION 1970 - 1973

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Seattle University
Seattle, Washington
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I. INTRODUCTION; BACKGROUND OF AND NEED FOR THE PROJECT

Background of the Project

An awareness of the prospective potential in the medical record profession to meet health manpower needs led the Project Participants to explore and find ways to solve a burgeoning problem. The problem was one of "dead-ended" technical level medical record personnel. Today there are two recognized levels of practitioners. They are: Technical level - medical record technician; Management level - medical record administrator. This was not always true.

The medical record administrator (MRA)* was recognized in 1928 with the founding of the American Medical Record Association (AMRA).** Members comprised the personnel in hospital medical record departments. In 1933, two avenues of entry into the profession were available: one, via 2-4 year educational programs; two, via work experience. Both avenues required the successful completion of a national registration examination.*** Eligibility for the examination required that a candidate be at least of age and a high school graduate with specified work experience or graduation from an approved school.

In 1953, the medical record technician (MRT) was recognized. The technician was to be trained to supplement the thin ranks of medical record administrators to carry out technical duties of medical record processing. In 1953 the only avenue of entry into the technician level was through a hospital training program. The first accrediting exam was given in 1955,**** the same year when research for the Pittsburgh Study began.

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*In 1971 the AMRA officially revised the title of this practitioner to medical record administrator. From 1928 to 1970 the title for the same professional was medical record librarian.

**In 1970 the Association became the American Medical Record Association. From 1928 to 1969 it was the American Association of Medical Record Librarians (AAMRL).

***Upon satisfactorily passing the registration exam, medical record administrators use the letters RRA to signify that they are registered by the AMRA. Prior to 1971 the professionals were registered as RRL based on the previous title of medical record librarian.

****Upon satisfactorily passing the accreditation exam, medical record technicians use the letters ART to signify that they are accredited by the AMRA.
The Pittsburg Study, which was sponsored by the AMRA, concentrated on the educational needs of the medical record administrator. It concluded "that a strong liberal arts course leading to a baccalaureate degree is essential" for the education of the medical record administrator. Although by 1957 many schools advocated and were providing this type of program, education in a formal university program was not required. The Pittsburg Study resulted in the gradual movement of the medical record administration programs into university based programs.

Although the Pittsburg Study did not include medical record technicians in its questionnaire, it did define a curriculum for them and recommended that medical record technicians be trained in nine-month hospital programs. In 1962, the MRT schools were averaging only six students per school, and consideration was given to phasing out the hospital programs. Then two developments occurred:

First, based upon a rider on a 1961 bylaw amendment approved by the American Medical Record Association, House of Delegates, a correspondence course which had been developed for training medical record personnel was recognized as an approved training program for MRT's. This course was "not designed to prepare persons for registration as a medical record technician", and it did not intend to provide credit toward this goal. However, when the course was ready for distribution in 1962, a special Advisory Council on Association Development suggested that all MRT's be trained by correspondence because nationally, the hospital schools were training only 45-55 graduates each year. In 1962, the AMA (American Medical Association), based on AMRA recommendations, recognized the correspondence course and approved the program for preparation of MRT's. This provided a second avenue of entry into the technician level.

Second, the junior colleges became interested, likely developers of the MRT programs and "gradually hospital-based MRT programs were being shifted to the junior colleges".

Until 1965, it was possible for an accredited medical record technician to progress to registered medical record administrator through experience and personal study, plus two years of college or the acquisition of a Registered Nurse (RN) designation. In 1970 this avenue of progression was closed when the AMRA HOD adopted new Essentials for Medical Record Administration Programs. These new Essentials required that a medical record administrator have a baccalaureate degree and be a graduate from an approved school of medical record administration.
The project participants' interest in the progression problem was activated in 1968. Two events in that year brought their attention to the problem.

One, the AMRA published a Guide For Use of Registered Record Librarians and Accredited Record Technicians as Supervisory Medical Record Librarians. The Guide was developed to assist interested parties in differentiating between functional levels of medical record practitioners, especially in their roles in providing professional medical record services for facilities receiving funding through the Medicare program. As published, the Guide stated that the AMRA concurred with the federal sponsors of the Medicare rules and regulations that the medical record technician and medical record administrators were equally qualified to serve as consultants or medical record department supervisors. The professional organization was maintaining two levels of personnel yet the distinction between the role of the medical record technician and the role of medical record administrator was not clearly differentiated in the Guide.

Second, the Education and Registration Committee of the AMRA carried out a comparative study of medical record curricula in the MRT and MRA programs. Two consensus statements resulted:

1. The programs or curricula designed for the preparation of MRT's and MRA's are not identical in their components or in their experiential requirements.

2. Certain elements within the two programs are comparable, and MRA school administrators are encouraged to identify these segments in order to aid the medical record technician to progress with a limited loss of credit.
There are several reasons why curriculum articulation was important in 1969. Perhaps the most significant reason can be demonstrated by a visualization of Table I and the following explanation. Until 1964 accredited medical record technicians could write the registration examination to become medical record administrators if they also met work experience requirements. When progression through work experience and accreditation was denied to the medical record technician it also limited potential work force. (See Table I). The move to discontinue progression through the original method gave us a serious interest in providing technicians with a reasonable route to becoming medical record administrators. A need for more medical record administrators is well documented. It is logical to recruit NRA's from the pool of medical record technicians. This is the crux of the need for articulation. Table I points out theappallingly low number of administrators being registered during the six year period 1965-1970. Yet, it is the medical record administrator who is qualified, through educational preparation, to provide direction and coordination of patient care information in a variety of organizational and/or institutional settings. Although the role of the administrator had been equated with that of the technician through federal Medicare regulations, the schools continued to provide curricula that differentiated between the administrator and technician, and federally sponsored studies indicated an urgent need for more medical record personnel, especially at the administrator level.

There were probably two reasons in 1967 for the AMRA to appoint a Special Committee to Delineate Functions of a Medical Record Department. First, the medical record technicians, buoyed by their increasing ranks and stymied on their original avenue to progression, made a strong call for the sponsoring professional organization to re-create a vehicle for their transition to medical record administrator. After all, this same sponsor had sanctioned federal regulations that gave the technicians equal footing with administrators in the job market.

It seemed only natural to the technicians, then, that the AMRA should carry out a program to provide technicians a transitional credentialing method. This method, they reasoned, should be as accessible as the previous method. Regarding progression, AMRA correspondence course medical record technicians urged the Association to include them on an equal footing with school educated technicians. (It is interesting to note, at this writing, in 1976, that school and correspondence educated technicians still share equal technician credentials but rivalry has surfaced. Perhaps, this rivalry stems in part from the tremendous increase in school prepared technicians since the growth of the community colleges in the '70's.)
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<td>AMRA Correspondence</td>
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<td>Registered Record Administrators</td>
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Second, many technicians voiced the opinion that their individual job performance, work experience and salary demonstrated that they were "equal" to the medical record administrators. For them, only a quick and easy method of progression was an acceptable solution. It took the committee two years to deliberate and when it had completed its study, recommendations were published in a small document which did attempt a delineation of the roles and functions of medical record personnel. As a scientific document, however, it fell far short of providing an objective, task-oriented description that many expected. However, the AMRA was satisfied it had achieved some alleviation of the problem created by their earlier collaboration with federal requirements. They said, in part, when the recommendations of the committee were published... "publication should be of help to educational programs..." While the document probably did offer help to some in identifying and differentiating between job titles and some job tasks of the various levels of personnel who worked in a medical record department, it did not include any commentary on the feasibility of a progression program nor did it attempt a delineation of curricular factors that gave proof of the difference between the two professional levels of medical record practitioners.

The comparative study of medical record curricula demonstrated that the sponsoring Association was aware of the progression issue. AMRA encouraged medical record administration schools to examine their own curricula to identify commonalities and differences. Project Participants, too, saw the need for a means of progression for the increasing number of accredited technicians, not only to fulfill traditional employment positions but also new ones created by the continued expansion of health care and the concomitant information explosion.

In 1969, the Project Participants applied for a grant to develop a curriculum ladder in medical record science.* Seattle University, Seattle, Washington, was especially well-suited for making this comparative study, as suggested by the AMRA committee, and for developing the curriculum ladder. It was the only Northwestern United States institution granting medical record administration degrees and fifth-year certificates, and is centrally located among seven schools with medical record technician programs.

*This monograph, prepared and published through a contract with the Bureau of Health Manpower, Health Resources Administration (U.S.D.H.E.W.) is a description of the three-year project that was funded and sponsored by the Program Assistance Branch, U.S.D.H.E.W., from 7-1-70 until 12-31-73.
II. PLANNING THE PROJECT AND SETTING ITS OBJECTIVES

Planning the Project

Using previous activities, sharing experience with educators in the medical record and other allied health professions, and building on information gathered during their own educational and professional experiences, the Project Participants developed a plan with four major components: a consortium, workshops, newsletters, and an advisory committee. These components were deemed necessary to facilitate changes in the anticipated curriculum revisions. (Cf. Chapter IV)

The plan was to undertake the project at a regional level. The media included correspondence, research, development of guidelines for use in gathering and comparing information, and making a comparative study of a local community college medical record technician program with the Seattle University program.

At the 1969 AMRA Educator's Workshop, we and other participants worked in small groups trying to solve case studies describing progression situations. This was an activity prepared and designed by the Academic Department of the AMRA and as such indicated their interest in bringing the progression dilemma to the attention of medical record educators. Additional emphasis was given to the problem by the AMRA during that Autumn meeting in New York. A four-point recommendation was made to the House of Delegates by the Executive Board. This recommendation, approved by the House, stated the following:

1. The AMRRL believes that an Accredited Record Technician should have the opportunity to complete academic requirements for registration. The medical record technician and medical record [administrator] educational programs should be coordinated to allow ease of progression, avoid subject matter duplication and minimize loss of academic credit.

2. Any plan for progression from ART to [RRA] must incorporate the completion of a baccalaureate degree and an accredited academic program of professional study in medical record administration. The latter may be within a curriculum which leads to a baccalaureate degree, a post baccalaureate program, or on an individually designed basis within an accredited medical record [administration] program.

The Project Participants saw the application of the regional project at a national level for these reasons: 1) all U.S. medical record curricula share the same requirements for accreditation; 2) they share the same national accrediting bodies; 3) all graduates write the same national examinations; 4) all salaried and non-salaried Project Participants, with the exception of one secretary and one consultant, were active members of the AMRA, and 5) two Participants were AMRA committee members during the project period.
3. The responsibility for evaluating formal educational programs and related work experiences and granting credit, advanced standing, or equivalency rating, continues to rest with the individual educational institution and not with the [AMRA].

4. In order to encourage educational institutions to make accommodations for individual backgrounds and experience, the [AMRA] will provide leadership to medical record administration school directors and schools, in developing testing procedures and other techniques for granting credit, advanced standing or equivalency status in required professional courses. This procedure is especially important for those who have completed work (courses of study) outside of existing collegiate programs.7

Because there was no historical document available that described the development and growth of the medical record profession, the Project Participants researched and then wrote a paper, making it available to the American Medical Association (AMA), the American Medical Record Association (AMRA), and the American Society of Allied Health Professions (ASAH).8 This task helped to define the current state of affairs and to set future directions.
Setting its Objectives

The close proximity of several technician schools, the funding of a basic improvement grant, an adequate number of faculty, increasing enrollment of students representing diverse educations and geographic background, and professional identification of the Project Participants as facilitators of change led to the setting of these objectives used throughout the project:

1. Design and put into effect a curriculum for medical record personnel which would provide educational progression for associate arts degree medical record technicians to baccalaureate degree medical record administration programs.*

2. Research, classify and compare curriculum content of the technician and administration programs.

3. Develop classroom and laboratory instructional materials.

4. Identify medical record curriculum components compatible with other allied health curricula for development of core allied health courses.

5. Inform those in the profession about the project and its relationship to their own programs, aiming thereby at promoting changes at all levels of the profession--educators and practitioners.

To achieve these ends, the plan included the identification of participating professionals deemed capable of accomplishing the project objectives, and a framework for action research. Communication among Project Participants and contributors, and coordination of their activities would be essential to the project's success. Because there was no mandate, rule or policy requiring any school to provide articulation for medical record technicians, participation relied upon an ability to convince technician educators of the need for their cooperation and mutual efforts in curriculum restructuring to provide a curriculum ladder.

*Although we wanted to include AMRA correspondence course technician graduates, the course outline was not available to us and therefore serious study of it could not be performed. Subsequent to the termination of the project, however, we did address the correspondence course curricula through direct contact with correspondence course technicians who were interested in progressing and willingly shared their lessons and took challenge exams to assist us in determining their level of scholarship.
Accordingly, two originators of the project—the medical record educator-authors—established a framework of a consortium, advisory committee, and consultant. The consortium would consist of all interested medical record technician and administration programs in the Northwest and surrounding states. Initially, the lone medical record administration program represented was that of Providence Hospital—Seattle University.* The consortium, through periodic workshops, would exchange information, share ideas, review existing individual curricula, and develop curriculum.

To provide direction for the consortium, an advisory committee was formed early. It was composed of one representative of the AMA as the major accrediting body for medical record programs, a hospital administrator, several medical-record-practitioners, several higher education representatives, two physician-educators, and a recent graduate of the baccalaureate program. The project staff perceived the advisory committee participating in a dual role as an advisor and a communicator. The curriculum of medical record programs has long been an unknown entity to many health and medical professionals. It was the purpose of the project staff, therefore, to provide the advisory committee with factual information that included the numbers of students enrolled in U.S. schools, and the content of the curriculum being provided to medical record students at both levels. Another intent was to seek future directions regarding possible job opportunities for graduates of medical records programs.

To provide assistance in developing a progression program and curriculum ladder, the Project-Participants sought and found, in the Seattle area, a consultant with these qualifications: experience in 1) facilitating group sharing and changing; 2) curriculum design; and 3) education administration.**

---

*Seattle University was, at the time the project commenced, the only school in the Northwestern United States that offered a baccalaureate degree in medical record administration.

**The consultant worked with the project staff and Consortium for the entire project period.
III. METHODOLOGY AND DEVELOPMENTS OF THE CONSORTIUM OF MEDICAL RECORD BACCALAUREATE AND ASSOCIATE ARTS DEGREE PROGRAMS IN THE NORTHWEST REGION

Methodology

In July, 1970, Medical Record Technician Educators in the Northwest reacted positively to the prospect of a Consortium and in August a workshop. The participants concurred in the compelling and urgent need for Medical Record Educators at both the baccalaureate and technician levels to:

...share information;
...review individual program curricula;
...discuss course content and course titles;
...identify different and like areas in individual program curricula;
...discuss and develop needed teaching materials;
...participate with others who have the same professional interest;
...share feedback on job-performance of graduates.

**Participants in the Consortium throughout the project period included the following educators, practitioners and affiliated institutions:

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<th>Name</th>
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<tbody>
<tr>
<td>Ardis Alfrey</td>
<td>The Mason Clinic, Seattle, Wash.</td>
</tr>
<tr>
<td>Carolyn Anderson</td>
<td>Tacoma Community College, Tacoma, Wash.</td>
</tr>
<tr>
<td>Sondra Bengston</td>
<td>Shoreline Community College, Seattle, Wash.</td>
</tr>
<tr>
<td>Betty Biles</td>
<td>Broome Community College, Binghampton, N.Y.</td>
</tr>
<tr>
<td>Sister Anne Bouffard</td>
<td>Carroll College, Helena, Mont.</td>
</tr>
<tr>
<td>Antje Cain</td>
<td>Portland Community College, Portland, Ore.</td>
</tr>
<tr>
<td>Barbara Cole</td>
<td>Group Health Cooperative, Seattle, Wash.</td>
</tr>
<tr>
<td>Judy Coltrih</td>
<td>Boise State College, Boise, Idaho</td>
</tr>
<tr>
<td>Ruth Foggiato</td>
<td>City College of San Francisco, San Francisco, Cal.</td>
</tr>
<tr>
<td>Theodore Cline, Ph.D.*</td>
<td>Shoreline School District, Seattle, Wash.</td>
</tr>
<tr>
<td>Everlina Holmes</td>
<td>Central Oregon Community College, Bend, Ore.</td>
</tr>
<tr>
<td>Beverly Hooten</td>
<td>Portland Community College, Portland, Ore.</td>
</tr>
<tr>
<td>Claire Knierim</td>
<td>Seattle University, Seattle, Wash.</td>
</tr>
<tr>
<td>Gretchen Murphy</td>
<td>Seattle University, Seattle, Wash.</td>
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<tr>
<td>Eileen O'Donnell</td>
<td>Seattle University, Seattle, Wash.</td>
</tr>
<tr>
<td>Kaaren Pynchon</td>
<td>Arapahoe Community College, Littleton, Col.</td>
</tr>
<tr>
<td>Beverli Roding</td>
<td>Spokane Community College, Spokane, Wash.</td>
</tr>
<tr>
<td>Elaine Rockne</td>
<td>Boise State College, Boise, Idaho</td>
</tr>
<tr>
<td>Jane Story</td>
<td>Portland Community College, Portland, Ore.</td>
</tr>
<tr>
<td>Helen Waferman</td>
<td>Shoreline Community College, Seattle, Wash.</td>
</tr>
<tr>
<td>Sister Valentina Wisner</td>
<td>St. Louis University, St. Louis, Missouri</td>
</tr>
<tr>
<td>Charles Yackulic</td>
<td>Seattle University, Seattle, Wash.</td>
</tr>
</tbody>
</table>

*Project Consultant
The August workshop provided a medium of communication beyond the annual AMRA two-day educator's workshop preceding the annual convention and the AMRA Education Newsletter. The group first brainstormed areas of concern, identifying these eight areas: 1) existing medical record technician curricula; 2) course outlines; 3) lack of teaching materials; 4) inconsistency of credit hours among individual programs; 5) perceptions of the sameness and difference between medical record technician and medical record administrator; 6) individual educator's perceptions about performance capabilities and education among administrators; 7) individual educator's perceptions about performance capabilities and education among technicians; and 8) educator's perceptions of job performance expectations.

Among the major concerns of the group was number 3, the absence of a medical record textbook and teaching material beyond the materials prepared by individual teachers for their own classes. In spite of this concern, however, the group, through direction and decision-making processes guided by the consultant, selected as its first steps the design and then the implementation of a curriculum ladder—the original goal of the project.

The success of the August workshop led to a scheduling of additional workshops with the original group effectively inviting others to join. The Consortium and its workshops provided avenues for active participation and served as the major source of cooperative development of the curriculum ladder.
Developments

Illustrative of year-by-year activities of the Consortium and project staff is this list of project activities:

First Year

Study the content of both technician and librarian programs and classify the content into levels of instruction.
Design a framework for the Curriculum ladder project.
Compare curriculum content of MRT and MRA programs, using copies of course outline, credit hour distribution and course descriptions.
Study course outlines prepared for the accredited schools by the AMRA (comparison between MRT and MRA).
Formulate a listing of job performance expectations of MRT's.
Formulate a listing of course requirements for MRT's.
Identify knowledge, skills, and attitudes for educators of MRT's.
Identify individual MRT program modifications necessary for progression.
Develop teaching material for medical record science laboratory assignments.
Publish a newsletter regarding project activities and other related professional information.

Second Year

Organize a regional group of medical record educators.
Participate with AMRA in the revision of course outlines for MRT schools.
Expand the list of project participants to include representatives from three additional western states.
Relocate MRA program from a hospital to a university campus.
Increase accessibility to the baccalaureate program for undergraduate transfer students.
Study and analyze the UCLA task analysis for medical record personnel.
Correlate the UCLA task analysis, as revised by the consortium, with the 1971 AMRA course outline for MRT's.
Develop a course for MRA programs, titled Health Care Delivery System.
Exchange and evaluate teaching material from project participants.
Expand course content and change course titles from Medical Record Science to Health Record Science in the MRA program.
Resequence Health Record Science courses in the MRA program to provide basic health record science in the first sequential course.
Initiate university action for ART students to receive direct transfer of credit for one course in the Health Record Science sequence.
Develop new methods and new materials for directed practice in the MRA program.
Survey MRA alumni to determine relationship of curriculum to function performed on the job.
Third Year

Evaluate the possibility of granting academic credit for work experience, involving Seattle Community College and Seattle University.

Restructure the second course of the Health Information Science sequence in the MRA program.

Change the name of the baccalaureate program to Health Information Services.

Formalize the articulation program for ART's between Seattle University and the seven participating community colleges.

The consortium activities of the first two years paved the way for providing a formal articulation program between the participating community colleges and Seattle University. The third year activities concentrated on the heart of the project: implementation of a curriculum ladder at the University. The administrative and curriculum decisions went through channels required by the University system.
SELECTED STEPS IN THE DESIGN OF A CURRICULUM LADDER: COMMUNICATIONS; COURSE CONTENT; CURRICULUM COMPARISON; COURSE SCOPE AND SEQUENCE; ROLES AND FUNCTIONS; TITLES AND PLACES TO WORK; CREDIT FOR WORK EXPERIENCE; DIRECTED PRACTICE; DESIGNING EXAMINATIONS.

Communications

One of the project objectives was to inform those in the profession about the project and its relationship to their own programs. (Cf. Page nine) In keeping with this objective, aimed at promoting changes at all levels of the profession—educators and practitioners—a newsletter was designed and published soon after the project was initiated. Titled "SHARE," this newsletter was first mailed out on November, 1970, and became a focal point for:

...Informing the profession about the curriculum project;
...Encouraging others to take a look at the possibility of progression;
...Identifying research needs in Medical Record Education;
...Preparing a professional association for future educational changes;
...Listing resources for those interested in keeping up-to-date on educational changes that apply to medical records.

One example of the use of SHARE is the guide designed for the development of laboratory materials. In both levels of the medical record curriculum, laboratory courses required a large number of clock hours, especially in the MRT curriculum. Laboratory teaching materials depend for development on individuals who teach in the program. Table II on pages 16, 17, 18 illustrates an instrument that was developed by the project staff for use by other members of the consortium. It was presented to that group in March of 1971 and is a guideline to assist in the development of laboratory materials.

Another example is the May, 1971 SHARE description of the first proposal of a curriculum ladder as developed by the project, "Proposal for Progression for a community college Medical Record Technician Program to a University Medical Record Librarian Program." The proposal included:

Step 1: Evaluate the student for admission under the Seattle University admission policies;

Step 2: Accept the Associate of Arts Degree in Medical Record Technology from the community college and grant the student 90 hours of credit;

Step 3: Have the department evaluate the student's transfer to determine what additional course work will be necessary to fulfill the baccalaureate degree requirements in Medical Record Science.
LABORATORY CONCEPTS - IDEAS ABOUT STRUCTURE AND PLANNING AS METHODS OF INTRODUCING A LEARNING EXPERIENCE

The following ideas are listed as points to be considered. Some aspects have been tried during this past year. Others are simply ideas for further discussion. They may be considered individually or in related groups. These are attempts to engage the learner in more significant methods of learning.

<table>
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<tr>
<th>CONCEPTS</th>
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<td>1. Availability of alternate projects - particularly where there is more than one good application of theory available. If these were posted in advance, the student might benefit from selecting the project that interests him most... Places more responsibility on the student for controlling his own learning experience.</td>
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<td>2. Individual student maintenance of a folder containing all lab material undertaken during the quarter. This material could then be reviewed with the advisor and evaluated on a more personal level. This could include an evaluation of the labs by the student as well. Could provide more continuing interest in the labs and avoid lack of application because &quot;the labs aren't graded anyway.&quot;</td>
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<td>3. How about some system - regular - of evaluation of the labs by the students? This should be structured according to type of lab used. i.e. group discussion labs might be evaluated by different criteria than individual project labs. Would this be an area that students could help develop the criteria for evaluation themselves?</td>
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</table>
4. How about structuring the lab as on-going for the year? Would this involve correlating the labs as a separate learning experience not necessarily dependent on the lecture schedule? If it were possible to plan the lab this way, should there be required reading etc. posted in advance? Could this approach encompass all subject material?

5. Students should be involved with the planning of individual labs. Topics could be selected jointly with instructors. At what period during the year would this be most beneficial?

6. Students could be assigned to permanent groups for the quarter. The group would meet for all labs requiring group action. Each member could be required to evaluate and measure the effectiveness of the group in terms of progress. This evaluation should be documented. Could the group be assigned to one advisor? How about the group establishing individual and group objectives for themselves?

7. Allow interested students to develop and work on concepts that can be used instructionally in the labs...i.e. psychocybernetics; action research; group dynamics. Objectives could include drawing applications to such areas as inservice training; consulting; professional activities.
<table>
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<th>CONCEPTS</th>
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<td>8. Utilize one scheduled lab for current affairs....for example, require each student to read X many articles, books etc. on current topics related to the profession and use the scheduled lab as reporting time. Students could cover scheduled topics through group discussion. Each student could hand in to the advisor, written reports of the material covered during the quarter. Here again, students could determine topics; objectives; criteria for evaluation.</td>
</tr>
<tr>
<td>9. How about a lab time set aside for professional development and activities? This could include working with state and local groups in current projects; working up educational programs to be presented to state or local members; involvement with national interest; preparing written material for submission for publication....</td>
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| COMMENTS |
SHARE continued with a listing of the courses common to both medical record administration and medical record technician programs according to the Essentials of the American Medical Record Association:

Medical Record Science
  Medical Terminology
  Anatomy and Physiology
  Directed Practice

SHARE then pointed out a number of other items that should be considered in evaluating Associate Arts degree students who wish to receive a baccalaureate degree in Medical Record Science:

1. Medical terminology and a laboratory course in anatomy and physiology should be transferrable for fulfillment of the medical record administrator's courses in these areas. However, additional course work would be required in medical record science and directed practice. The reason: emphasis and time allotted to these courses are not the same for technicians and administrators. Suggested were 5 credits of medical record science and 3 credits of directed practice to be applied to the professional medical record administration program.

2. If other courses are offered in medical record technician programs which have similar course descriptions and similar credit hour allotments, they should be evaluated for potentially fulfilling other medical record administration program requirements.

3. Two year medical record technician programs have 20-45 credit hours available for completion of core academic courses. All of these credits could be taken in areas which would satisfy baccalaureate degree requirements. With careful planning a student should be able to complete the requirements for a baccalaureate degree in medical record science with approximately 90 hours of additional credits.*

*Seattle University is on a quarter credit system.
4. Associate Arts degree students who wish to receive a baccalaureate degree at Seattle University in Medical Record Science need to satisfy:

CORE requirements:
- 10 hours of English
- 10 hours of History
- 10 hours of Philosophy
- 5 hours of Theology

DEPARTMENTAL requirements:
- 20 hours of Science, including anatomy and physiology
- 20 hours of Business
- 10 hours of Social Science

PROFESSIONAL requirements:
- 15 hours of Medical Record Science
- 3 hours of Medical Terminology
- 5 hours of Medical Science
- 5 hours of Directed Practice
- 7 hours of Organization and Administration
- 3 hours of Legal Concepts
- 3 hours of Data Processing
- 4 hours of Seminar Courses

Potentially the Associate Arts degree medical record technician student could have fulfilled:

CORE requirements:
- 10 hours of English
- 10 hours of History

DEPARTMENTAL requirements:
- 10 hours of Science
- 10 hours of Business
- 5 hours of Social Science

PROFESSIONAL requirements:
- 5 hours of Medical Record Science
- 3 hours of Medical Terminology
- 2 hours of Directed Practice

5. Additional credits gained by the student while completing the Associate Arts degree which do not satisfy core, departmental or professional requirements could be utilized as electives.*

*The specific courses which fulfill the core and departmental requirements are listed in the Seattle University Bulletin of Information. During the three-year period, the program for medical record administrators relocated from Providence Hospital to the campus of Seattle University, a move that eased the transfer of credits for associate art technician students or graduates. The Seattle University residency requirement could be met during the senior year instead of the junior year which makes the transfer easier for technicians outside the Seattle area.
6. If a community college does not have a program in medical record technology, a student may follow the outline for a baccalaureate degree in Medical Record Science and have his Associate Arts degree program evaluated toward a baccalaureate degree in Medical Record Science.

The seven workshops combined with the Consortium activities during the three-year project period were continually reflected in SHARE.
**Course Content**

Because one of the prime steps in the design of a curriculum ladder was the development of a program that could provide easy access for an associate degree technician graduate, a survey of regional record technicians' schools was carried out to determine course content and credit hours. SHARE published the results of the survey and added three supplemental items that would be helpful to others in developing a similar project. They were:

1. A graphic comparative display of courses and credit hours for the schools included in the survey. (Cf. Appendix A)

2. A blank column on the comparative display so that schools could insert their own credit hours and evaluate their own programs. (Cf. Appendix A)

3. A comparison of similar sections of the Essentials for medical record schools as approved by the ANA Council on Education in collaboration with the American Medical Record Association. (See Table III)
Table III

Outlined on this and the next six pages is a comparison copy of the current AMRA Essentials for school programs for Technicians and Administrators. (1972)

ACCREDITATION

ART

The Council on Medical Education of the American Medical Association in collaboration with the Committee on Education and Registration of the American Medical Record Association establishes standards for medical record technician education, surveys and approves educational programs for students in medical record technology, and publishes lists of those programs which are acceptable for the information of hospitals, colleges, medical schools, physicians, prospective students, and for the protection of the public.

RRA

The council on Medical Education of the American Medical Association, in collaboration with the Committee on Education and Registration of the American Medical Record Association establishes standards for medical record science education, surveys and accredits educational programs for students in medical record science. Lists of accredited programs are published for the information of hospitals, colleges and universities, medical schools, physicians, prospective students, and for the protection of the public.

APPLICATION WITHDRAWAL

ART

Approval may be withdrawn whenever, in the opinion of the Council, a school does not maintain an educational program in accordance with the above standards, or has not been in operation for a period of two consecutive years.

RRA

Accreditation may be withdrawn whenever in the opinion of the Council a school does not maintain an educational program in accordance with the above standards or has not had students enrolled for a period of two consecutive years.
CLINICAL AFFILIATIONS

ART

A medical record department (or departments) should be designated as the primary teaching unit for demonstration, student observation, and initial directed practice experience. The directed practice material provided in the primary teaching unit should include functions and standards of procedure of sufficient scope to illustrate generally accepted medical record practice. In addition to the primary directed practice teaching unit, other medical record departments may be used for directed practice experience.

In each directed practice area, there should be qualified personnel with adequate experience in the specialized areas of medical record practice to which the students are assigned under the general director of the director of the program.

RRA

A medical record department (or departments) should be designated as the primary teaching unit for demonstration, student observation, and initial directed observation. The directed experience should be of sufficient scope to illustrate the generally accepted principles of medical record science.

In addition to the primary teaching unit, other medical record departments may be used for directed experience assignments. These medical record departments should be able to provide the type and amount of experience for which the student is assigned and should be under the direction of a registered record librarian.

FACILITIES

ART

A student health service should be available for evaluation and maintenance of mental and physical health.

A counseling service should be available for student guidance.

Library facilities should be readily accessible, and should contain an adequate supply of books, periodicals and other reference materials related to the curriculum.

RRA

A student health service should be available for evaluation and maintenance of the student's health.

A counseling service should be available for student guidance.

Library facilities should be readily accessible and should contain an adequate supply of books, periodicals, and other reference materials related to the curriculum.
Appropriate equipment and supplies should be provided in sufficient quantities for demonstrations and student participation. Classroom facilities should be available. Charts, models, slides, films, sample files, specimens and other appropriate teaching aids should be provided.

The director or coordinator of the program should have a baccalaureate degree, registration with the AMRA, and three years experience in the general practice of medical record science; or other appropriate educational qualifications or experience satisfactory to the two bodies concerned with accreditation.

The director of the program, whose qualifications are acceptable to the Council on Medical Education shall be responsible for the organization and administration, periodic review, continued development and general effectiveness of the educational program. In carrying out these functions, he shall be guided by the standards set forth in these Essentials, and by the established policies of the institution or institutions concerned. Schools may wish to appoint an advisory committee to assist in formulating these policies.

Approved schools should notify the Council on Medical Education whenever personnel or major curriculum changes in relation to the administration of the school.

The instructional staff should include one or more qualified medical record librarians.
ART

Sufficient staff should be available to instruct, counsel and supervise in the various facets of the educational program. The student-instructional staff ratio should be at least in the same proportion as similar technical education programs sponsored by the educational institution.

RRA

Sufficient staff should be available to instruct, counsel and supervise all students enrolled in the educational program.

That portion of the curriculum devoted to subjects of special interest, such as fundamentals of medical science, law, etc., should be formulated and conducted in collaboration with appropriate specialists in each field.

FINANCES

ART

Financing of the educational program should not depend solely upon student tuition fees but should be assured through stated college or hospital budgets, gifts or endowments in the same proportion as other technical educational programs sponsored by the institution.

RRA

Financial support of the educational program should be available through regular university or hospital budgets, endowments, grants or gifts. Experience has shown that an adequate curriculum in medical record science cannot be maintained solely by the income from student's fees.
The objectives of a training program for medical record technicians are to help the student gain an understanding of the significance of the work of the medical record profession, and of the place of the medical record administrator and medical record technician within it; to help him acquire skills and knowledge to become a competent medical record technician; and to guide him in the development of conduct and attitudes that will be expected of him as a member of the health team.

A medical record administrator should provide direction and leadership in the gathering and utilization of the scientific and social information relating to health care to the end that this information may have meaning at all levels of patient care. In order to achieve this, an educational program should include training and experience in medical record science and emphasize the importance of dedication to continuing study of the medical record field, of the development of individual abilities for independent action, and of conscious knowledge of the ethics of health care.

A bulletin describing the curriculum should be issued at least biennially. It should include information regarding the organization of the program and a listing of required courses, entrance requirements, tuition, and fees, and the information concerning hospitals and facilities used for directed practice experience.
A record of class participation and accomplishment of each student should be kept in accordance with the college or hospital requirements. A detailed analysis of the laboratory experience and directed practice of each student should be on file.

Copies of the course outlines, class schedules, directed practice schedules and teaching plans should be on file in colleges and hospitals, and open for review.

In colleges, selection of students should be made by the admissions office in cooperation with those responsible for the educational program in accordance with the generally accepted practice of the school. In hospital sponsored programs, selection of students should be made by an admissions committee in cooperation with those responsible for the educational program. Admissions data should be on file at all times in colleges or hospitals sponsoring the program. All applicants should be required to submit adequate evidence of satisfactory physical and mental health.
WHERE PROGRAMS CAN BE ESTABLISHED

ART.

Technical educational programs may be established in colleges accredited by their respective regional associations, provided that hospitals suitable for directed experiences are available. Educational programs of no less than the equivalent of nine months study may also be established in hospitals for students. Hospitals involved in education programs should be acceptable to the Council on Medical Education and should be accredited by the Joint Commissions on Accreditation of Hospitals.

EDC.

Educational programs may be established in colleges and universities accredited by their respective regional associations. Hospitals suitable for directed experience should be available.

Hospitals may establish programs for students whose education meets the requirements. These programs should be at least one year in length.

Hospitals participating in educational programs should be accredited by the Joint Commission on Accreditation of Hospitals.
Concerned with providing guidelines that will bring maximum flexibility and allow individual programs to stress uniqueness and quality, the American Medical Record Association in 1971 was pondering the rigorous task of revising the Essentials for its two school programs.

Two of many considerations in revising the Essentials are:

1. **A STATEMENT OF THE ESSENTIALS IN OBJECTIVES RATHER THAN CREDIT OR CLOCK HOUR REQUIREMENTS.**

2. **AN EXPANSION AND COMBINING OF THE ESSENTIALS TO ENCOMPASS, IN ONE DOCUMENT, CURRICULUM OBJECTIVES FOR ALL THE EDUCATIONAL PROGRAMS OF THE ASSOCIATION.** (The AMRA Correspondence Course Technician program, the planned Continuing Education program, the college medical record technician and medical record administration programs)

These considerations were presented by the Consortium at an annual AMRA Educators Workshop.

Another important step in the design of a curriculum ladder is the comparison of the curriculum content as described in the Essentials of MRA and NRT programs. Here are the Essentials that the consortium compared and considered:

**R.R.A.**

**IV. EDUCATIONAL PROGRAMS**

21. Medical Record Administrator education should be at the baccalaureate level either incorporated into a four-year program leading to a baccalaureate degree, or in a program of post-baccalaureate study. The admission requirement to a one-year hospital-based school, not affiliated with a college for purposes of a degree, shall be a baccalaureate degree.
V. CURRICULUM

22. As stated in the introduction to these Essentials, it is desirable that the pre-professional education of the medical record administrator include the study of the humanities, behavioral, biological and physical sciences. The pre-professional course work must include two years of natural sciences of which a laboratory course in anatomy and physiology shall be a part. A background in the fundamentals of statistics and research methods is also required.

23. The following professional curriculum is intended primarily as a guide. The specific subject areas which must be covered are outlined including a brief description of the course content for each and an indication of a suggested number of semester credits which may be appropriate for each. Determination of actual course structure and of credit assignment is the responsibility of the institution offering the medical record program. The institution may wish to develop these courses in conjunction with other allied health programs.

MEDICAL TERMINOLOGY

A study of the language of medicine including word construction, and use of terms related to all areas of medical science, hospital service and the allied health specialties.

Credit assignment - 3 semester credits
- 4 quarter credits

MEDICAL RECORD SCIENCE

An introduction to the field of medical record science, including an orientation to medical care institutions, the history of medical records, professional ethics, and the function of a medical record department.

A study in depth of the medical record, its components, development and use; coding and indexing of medical information; preservation of records; and research techniques.

A survey of related medical record systems for departments of the hospital and for other health care facilities.

Lectures should be supplemented with laboratory experience.

Credit assignment - 12 semester credits
- 18 quarter credits

FUNDAMENTALS OF MEDICAL SCIENCE

An introduction to medical science including study of the nature and cause of disease, treatment and management of patients.

Credit assignment - 6 semester credits
- 9 quarter credits
ORGANIZATION AND ADMINISTRATION

A study of the principles of organization, administration, supervision, and human relations.

Application of those principles to the medical record department.

Analysis of organizational patterns in hospitals and other health care facilities.

Credit assignment - 6 semester credits
- 9 quarter credits

LEGAL CONCEPTS FOR HEALTH FIELDS

A study of the principles of law as applied to the health field, with particular reference to all phases of medical record practice.

Credit assignment - 2 semester credits
- 3 quarter credits

DATA PROCESSING SYSTEMS

A study of data processing systems and their application of newer techniques to the handling of information in medical institutions.

Credit assignment - 2 semester credits
- 3 quarter credits

SEMINAR IN MEDICAL RECORDS

A discussion of topics arising from students' study and experience in medical record practice.

Credit assignment - 2 semester credits
- 3 quarter credits

DIRECTED EXPERIENCE

The supervised learning experience through which the student develops insight, understanding and skill in medical record procedures; learns to deal with the problems of medical record personnel; accepts responsibilities and recognizes the need for preserving the confidential nature of medical records; recognizes the contribution of and learns to work with other professional personnel.
Assignments for directed experience should be made to medical record departments that conform to the standards set forth in item 14, 15, and 19. The students' assignments should be structured so that experience is gained in all types of medical record procedures previously studied through classroom presentation and laboratory experience. It is strongly recommended that at least one of the assignments for directed experience be full time, extending over a 2 to 4 week period.

Credit assignment - 5 semester credits - 7 quarter credits

LABORATORY EXPERIENCE

In conjunction with areas of study such as medical record science and organization and administration, instructional activities should include experiences which are practical or laboratory in nature. These may consist of case studies, use of simulated and actual materials, direct observation, field visits and other appropriate techniques for practical application of principles.
A.R.T.

IV. EDUCATIONAL PROGRAM

18. Admission Requirements: Candidates for admission should have completed the requirements for high school graduation or should have passed a college entrance examination for admission to an accredited college or university. They should be proficient in typing. A background in mathematics and the biological sciences would be advantageous.

19. Technical Curriculum: The curriculum shall be designed to assure that students develop an appreciation of their working relationships to medical and paramedical personnel. They shall acquire an understanding of the contents of medical records, and of the ethical and legal principles governing their use.

Incorporated in the program for the preparation of medical record technicians should be planned laboratory experiences and directed practice which provide a transition from theory to application. These activities should include both laboratory practice and field assignments, case studies and similar educational designs which allow for the application of previous and on-going technical learning under the direction of competent instructors and practitioners.

The course of training should include not less than nine months of theoretical instruction and practical hospital experience, in order that students acquire the following technical skills:

1. Skills in registration of in and outpatients.
2. Numbering, filing and preservation of medical records.
3. Assembling and analyzing medical records for completeness and accuracy.
4. Collecting medical care and census data for statistical purposes, and computing and preparing of statistical reports.
5. Maintenance and use of indexes of patients, physicians, diseases and operations.
6. Transcribing medical reports.
7. Coding of diseases and operations by the Standard Nomenclature of Diseases and Operations and the International Classification of Diseases Adapted.
8. Proper use of information from medical records.
9. Recording and reporting of vital statistics.
10. Adaptation of secretarial skills to the work of the medical record technician.
THEORETICAL INSTRUCTION

Theoretical instruction may be presented by formal lectures, and informal conferences, or seminars, and should include the following:

Medcal Terminology .......... 45 clock hours lecture
prefixes, suffixes, roots, abbreviations, disease, operative and drug terms. A study of terms related to all areas of medical science, hospital service and the paramedical specialties.

Anatomy and Physiology ........ 60 clock hours lecture

Medical Record Science ...... 90 clock hours lecture
Orientation to the hospital and the medical record department, obtaining, preserving, and using medical records, coding according to SNDO and ICDA, statistics, legal aspects of medical records, ethics.

DIRECTED PRACTICE (Practical Experience)

Practical experience should be provided of sufficient quality and scope to prepare the student for active participation in the performance of technical duties in the medical record department. Repetitive activities which do not advance the skills of the students should be avoided.

Admitting Procedures
Admitting Office ............. 20 clock hours
Authorization for admissions, interview and recording of sociological data, assignment of hospital number, preparation of admission forms and registers.

Medical Record Department ... 40 clock hours
Preparation of index cards, chart folders, correlation with previous records, maintenance of patient index.

Machine Transcription ....... 120 clock hours
(including reports and record systems of adjunct service departments)
Statistics: 60 clock hours
Daily, monthly and annual reports; daily census; vital statistics, birth and death certificates.

Discharge Procedures: 100 clock hours
Assembling records, checking for completeness, daily analysis, record completion procedures.

Coding and Indexing: 100 clock hours
SNDO and ICD coding, maintenance of diagnostic, operative, physicians indexes.

Legal Aspects: 20 clock hours
Subpoenas; taking records to court; preparing records for court; release of information.

Secretarial Practice: 80 clock hours
Correspondence; medical abstracts; insurance reports; receptionist and telephone functions; contact with public and hospital staff.

Total - 540 clock hours

Directed Practice

The above directed practice outline does not constitute absolute clock hour requirement, but is intended as a guide for the organization of the educational program.
CURRICULUM COMPARISON

A comparison of the curricula for the two levels and consideration of the implications thereof led to initial steps in the design of a curriculum ladder:

1. The MRA Program cannot provide progression if the HRT school courses do not fulfill the requirements of the AMA-AMRA Essentials for approved MRA schools. As an example, the MRA's Essentials state, "The pre-professional course work must include two years natural sciences of which a laboratory course in Anatomy and Physiology shall be a part".

2. The MRA schools must have accurate, complete knowledge of the course content of HRT school programs in order to plan a transfer of credit and/or credit by examination.

Both of the previous considerations became an integral part of the Consortium's activities. The Medical Record Technician Educators discovered, among themselves they were not aware, prior to the project, that their individual programs did not all march to the same tune. Through our workshop sessions they discovered, for example, that some of them did not have laboratory courses in anatomy and physiology. They also discovered that they themselves were not familiar with each other's course content even though the courses had the same titles.

Course Scope and Sequence

Another significant step in designing the curriculum ladder was the determination of the sequence and scope of topics offered at the technician level. This topic presentation would affect entry level for those transferring to the baccalaureate level. If, for example, a student wished to transfer into the baccalaureate program prior to completing an associate arts degree program at the technician level, the content of topics and their sequence in the courses would be very important in effecting the transfer of credits. Evaluation of the technician course content and course sequence played major parts in the project staff's efforts to design the baccalaureate curriculum. The sequence of the latter would have to accommodate progression after graduation from an associate arts degree as well as before graduation from an associate arts degree program.

Roles and Functions

Of concern to the project staff was the reoccurring idea that the design of a curriculum ladder was for professional people who had not yet clearly defined their roles in the health care delivery system. This role, it seemed, should be available in the form of objectives or performance standards and should describe in detail the roles and functions that the individual practitioner should be qualified to perform. In order to provide the Consortium with that kind of description, workshop activities were directed to developing a description of the performances of the two levels of practitioners. The following is a copy of the initial, brief description that the group developed.
What is a Registered Medical Records Administrator (RRA)?

Medical records are an important tool in the practice of medicine. They serve as a basis for planning patient care and provide a means of communication between the physician and other professional groups contributing to patient care. A medical record administrator:

1. Controls information flow into and out of health records and directs and manages the medical record department.
2. Coordinates information flow within the health delivery system.
3. Designs health information systems for data gathering, classifying, and retrieval.
4. Interprets the data retrieved for purposes of identifying trends, planning, and education.
5. Serves as a resource person to allied health agencies, accumulates and disseminates health information.

What is an Accredited Record Technician (ART)?

The medical record technician assists the medical record administrator in the medical record department. The medical record technician's duties include the following:

1. Reviews the medical records for completeness and accuracy.
2. Supervises filing activities.
3. Supervises the preparation of records for microfilming.
4. Types medical records of operations, X-Ray and laboratory examinations.
5. Prepares medical studies and tabulates data for research.
6. Prepares abstracts of medical records for data processing.
While the relatively small, regional consortium was attempting to define the role of the two levels of practitioners, a four year grant totaling $1.5 million dollars was authorized by the United States Office of Education to accomplish two major objectives. The recipient was the Division of Vocational Education at the University of California in Los Angeles. The U.C.L.A. objectives were 1) to develop modern and effective curriculum materials and instructional methods, and 2) to provide for continuous update of these materials and their nationwide dissemination. In order to do this, the UCLA project performed a task analysis of many of the allied health occupations, one of which was medical records. Using the "Background Report" and "Interim Report—Occupational Analysis of Tasks Performed in a Medical Record Department," three of the Consortium members, including one of the project staff, wrote a paper on the UCLA Task Analysis. This paper, *A Critique of the UCLA Task Analysis* provided much working material for the Consortium. Although it is a limited task analysis and has both positive and negative aspects, the UCLA report was the only available study to address the issue of the tasks performed in a Medical Records Department.

During the curriculum ladder project described herein, the American Medical Record Association was working at revising the Essentials for schools for both levels of practitioners. The Consortium, through its workshops, participated quite actively, by mail, with representatives of the AMRA who were charged with the responsibility of revising the Essentials. The strongest recommendation that the Consortium made was that before the Essentials for either practitioner be revised, the committee doing the revision should identify and approve the common and distinguishing roles of the medical record administrator and the medical record technician. In fact, it was strongly recommended by the Consortium that the Essentials be revised and published as one set of Essentials, with the exception of the curriculum section. It was thought that only the curriculum and description of occupation section really needed attention as far as being specifically different for each practitioner. The Consortium was very concerned that the behavioral objectives which stated the terminal behavior expected of the medical record administrator and medical record technician be clearly identified in the Essentials. It was hoped that the Essentials would identify and define the role of each practitioner and identify acceptable levels of performance.

One of the most interesting and eye-opening activities of the Consortium was the attempt to establish a relationship between what is performed on the job and what is being taught in educational programs. One of the issues left unanswered by the UCLA Task Analysis was: Who should perform certain medical record tasks as compared to who actually was performing them? The project consultant used his ability to facilitate group action and his expertise in the area of curriculum development to assist the Consortium in studying the task analysis in the light of the task inventories that it described. The Consortium compared the task inventory with current curriculum and feedback from graduates to determine how the inventory, curriculum and feedback fit together. This comparison led to a discussion of the expanding job opportunities different from the traditional ones in which medical record personnel had been working. The traditional employer is the hospital medical record department.
Titles and Places to Work

The project staff developed the following titles to encourage the medical record profession in its services to the current job market and to reflect the functions medical record professionals are qualified to perform:

- Health Data Analyst
- Health Record Technologist
- Biomedical Information Coordinator
- Biomatologist
- Clinical Information Coordinator
- Clinical Information Computologist
- Health Information Specialist
- Health Planning Coordinator
- Information Security Controller
- Professional Information Specialist
- Biomedical Information Interpreter
- Regional Health Information Scientist

Some of the places where people with these titles or those who have a background in medical records administration could work include:

- Private industry
- HMO's
- Universities
- Communicable Disease Centers
- Medical Specialty Clinics
- Health Data Centers
- Health Departments
- Elementary and Secondary Schools
- Health Facilities Consortiums
- Health Insurance Companies
- Research Organizations
- Regional Health Information Scientist
- Satellite Transmission Centers
- The National Center for Health Statistics

A survey by two students at Providence Hospital-Seattle University demonstrated that graduates were working in many and varied nontraditional places. Partly as a consequence of this survey, and partly through professional association activities of the authors, the title of the baccalaureate program was changed to reflect the current role of medical record administrators. Health Information Services became the title for the baccalaureate degree program when the program was relocated from Providence Hospital to the campus of Seattle University. Inherent in that title is the concept that graduates could work with all records related to health.

Credit for Work Experience

It soon became evident to the Consortium that granting credit for work experience is still a pioneering effort. Among barriers to credit for work experience are these: 1) lack of control over the work experience; 2) the wide area of performance on jobs; and 3) the difficulty of gauging performance skills by evaluators of the work experience. The closest the Consortium ever came to suggestions that might enable students with work experience to receive credit for the time spent on the job was to advise them to seek work experience credit through the community college. Then the students could get their associate arts degree and transfer into the baccalaureate degree program.
Directed Practice

In the baccalaureate program at Seattle University, that part of the curriculum commonly known as "directed practice" is called Practicum. It's the student's experience of working off-campus in a real job setting, but under the supervision of a clinical instructor. Both MRT and MRA students have Practicum as part of their program, but the experiences are not the same. The technician works primarily on attaining technical skills. Investigation by the Consortium concluded with the conviction that students who articulate feel a need to have some type of Practicum while in the medical record administration course. Since management courses are not a part of the medical record technician curriculum, progression favors concentration on some area of medical record management in the Practicum.

The Consortium discussed problems inherent in the Practicum, such as the payment of stipends to participating facilities and/or clinical instructors, evaluation of students by clinical instructors, evaluation of clinical instructors by students, motivating clinical instructors to take an active role in developing Practicum activities for students, the advisability of campus faculty visiting students while the latter are in off-campus facilities during the Practicum, grading for Practicum, and identifying the individual responsible for grading—the clinical instructor, student, or faculty advisor.

The Consortium shared information about their individual assignment of students to Practicum and their manner of coordination and planning of activities with off-campus facilities. Of concern to the Consortium was scheduling, a problem common to the medical record profession. The solution was offered as that of defining objectives. Thereby all involved in the Practicum are more likely to have similar conceptions of what the student is expected to learn in the Practicum. Each member of the Consortium wrote particular objectives for a given Practicum experience, which they then shared and evaluated. This method of communication was explored considerably by Seattle University during the project, but it took the form of a collaboration of objectives-writing among students, faculty and clinical advisors. Members of the Consortium subsequently used this technique for Practicum development in their own programs.

Designing Examinations

The development of an instrument for designing an examination was emphasized during the third year. The project staff, with the help of an educator, developed a table of specifications useful in designing tests. Because credit by examination was one of the first avenues of progression explored by the project staff, it was important for the group to know what part of the students' educational experiences need to be tested and how to construct a test that addresses the particular aspects of the learning experiences.
The project staff developed a Table of Specifications for Developing and Exam in a Medical Record Science Course, as displayed in abbreviated form on page 43. Considerations preceding its development were:

1. The areas tested might include terminology, memory, content and performance.

2. Key concepts should be obtained from the textbooks used.

3. Levels tested might be rote, understanding, or problem-solving abilities. (The latter, because it allows for variables in teachers and curricula, is recommended for state or national examinations.)

4. Vocabulary of a discipline is a necessary testing item.

5. Multiple choice is useful for testing vocabulary, processes that are constant, and concepts that can relate to a model.

The project staff also learned that giving the test to a large sample of students during the test construction period assures the internal consistency and validity of the test, that is, that each test item examines what it purports to test. Problems to be solved should be consistent with those that occur on the job. The work of the Consortium on behavioral objectives, especially terminal behavior, proved helpful in constructing tests.

The test items should be graded in difficulty. For example, among 25 test items, 40% (10 items) are for common learnings; 50% (12 items) are discriminatory of learnings; 10% (3 items) are for exceptional learnings.

In determining the test items for a 25-item, 50-item, 75-item or 100-item test, it's advisable to double the times for the sampling of students during the test construction period. Response analysis should furnish those items that 40% of the sample commonly pass, 50% that provide ranged discriminations and 10% that only a few can answer. Repetitions of this procedure provide items that are reliable, whose results can be depended upon for testing many kinds of students at different times. (Note: 75% correct responses would serve as a guideline for test-passing.)

The use of a Table of Specifications in test development helps to ensure:

1. Only those objectives that were a part of the instruction are measured;

2. Each objective receives appropriate emphasis in the test; and

3. No important objectives are overlooked.
Table IV
SAMPLE ABBREVIATED TABLE OF SPECIFICATIONS FOR DEVELOPING AN EXAM IN A MEDICAL RECORD SCIENCE COURSE.

<table>
<thead>
<tr>
<th>Content Dimension</th>
<th>Recall</th>
<th>Comprehension</th>
<th>Application</th>
<th>Analysis</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Record Science Terminology</td>
<td>5</td>
<td>10</td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Uses of the Medical Record</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>Analysis of the Record - Quantitatively</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Basic Statistical Measures utilizing Medical Records as a source</td>
<td>3</td>
<td>3</td>
<td>10</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>History of the Medical Record</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>JCAH recommendations relating to Medical Records</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>3</td>
<td>23</td>
</tr>
</tbody>
</table>

The table should reflect the relative emphasis given each objective in the instructional situation. Once the teacher has prepared his "Table of Specifications" for the exam, he then writes or selects test items that will fit each unit in the Table.
V. A RETROSPECTIVE LOOK AT THE PROJECT

Conclusions

The purpose of this project was to design and implement a curriculum ladder in medical record science, thereby providing articulation of ART's to the RRA. Curriculum revision did result from the project and a curriculum ladder has been implemented at Seattle University. Medical record technicians who have associate arts degrees can transfer into the program and receive full credit for 90 hours of their associate arts degree work plus approximately 10 credits towards the 45 credit hours of the professional health information curriculum at Seattle University. They may receive credit for some of their prior course work as elective credit hours towards the baccalaureate degree.

As stated earlier, we were aware of a need for progression prior to undertaking this project. Hard data to substantiate this awareness was published by the AMRA during the second year of the project. In the February, 1972, issue of Medical Record News, Martha Barclay, RRA, wrote an article entitled, ART progression - A Survey. Her report was a summary of a survey conducted by the AMRA at the suggestion of its Education & Registration Committee. All ART members of the AMRA were sent questionnaires in early 1971. Forms were mailed to 3,053 ARTs. The questionnaire asked for an expression of interest in progression in terms ranging from none to very slight, slight, great, and very great. Of the 1,009 respondents, 38% answered they had none to very slight interest and 62% expressed a great or very great interest in progression. Other information covered in the survey included educational background, geographic availability of schools for higher education in the medical record profession, preference of class scheduling as to time of day for continuing course work and individual ART's date of accreditation. The committee was disappointed with the response rate of 22.9% or 1,009 returns. This disappointment may have influenced the conclusions.

Conclusions stated in the article are:

"1) It appears that only 20% of the technicians are interested (or willing to state their interest) in progression.

2) The majority who did not respond may be satisfied and content with their acceptance as persons with some expertise in an allied field.

3) There is a need for two levels of knowledge in the medical record field, and each should be recognized and valued for its contributions."

17
The Northwest Health Record Educators' Consortium was pleased with the results of the AMRA survey on progression. None were surprised that of those responding to the survey, 65% were recent (68, 69 & 70) graduates. Familiarity with the progression concept and the actions being set in motion to accomplish progression would be more well known to recent graduates than to those who had been out of school or completed the correspondence course a number of years ago. The Consortium allowed that instead of assuming that those who did not reply were not interested in progressing that it was just as possible that those who did not reply had any possible number of reasons for not replying, only one of which might have been disinterest in progressing.

Action research is probably the key to the curriculum development project accomplishments. People studying together, developing curricular changes, and familiarizing themselves with the medical record profession as it relates to contemporary health care are all elements that made development of the curriculum ladder a reality. When we undertook this project, we didn't realize the comprehensive scope of it. We didn't recognize that it would be necessary to touch bases with so many people and attempt influence on so many professional areas. Perhaps this is true in any kind of a project where change is an important factor. Had we not discovered the resources necessary to make these changes, however, it is doubtful that the curriculum ladder would have developed. Major resources were the individuals who comprised the Consortium.

Action research was the method chosen to accomplish project objectives by the medical record educator—authors. Action research was discovered during their graduate studies and applied to the project. This was especially true because there was still a great need to develop curriculum for both medical record levels. There was also a great need for development of teaching materials and administrative guidelines for medical record educators. The whole area of medical record education was very much in the developmental stage. Our efforts to find research information or methodology for the development of educational material for our own program had led us up a blind alley on many previous occasions. We were aware that medical record educators had not, for the most part, been associated with a faculty long enough to have achieved tenure. They were not eligible for sabbaticals and did not have extra time to develop curriculum for medical records. Our familiarity with the absence of curriculum development in the profession was a decisive factor in choosing action research to accomplish the goals of the project. We were aware that there would not be time or funding within the curriculum ladder project to provide background research in many of the areas that would have to be touched on if the project were to be successful. Therefore, we decided early to involve medical record technician-educators, seek help from higher education advisors, and work in a collective manner to accomplish the goals to the project.
A need to enhance our professional self-image was one of the motivating, driving forces during the project. The medical record profession is a relatively new allied health profession, having been initiated as a professional association in 1928. To the general public and to some other health professionals it is a relatively unknown health profession. When known, it is often unclearly identified as to its educational background or role. True, its numbers are small: about 10,000 active medical record professionals, 6,000 of them AKT's and 4,000 RRA's enjoying active status with the AMRA. Because of the vital issue of recruiting students who would seek career mobility and become active in the delivery of health care through expertise in medical records, the self-image of the medical records profession was a major concern of everyone involved with the project. The following article from the last-published issue of SHARE reflects this concern.

"We've got an IMAGE - What is it?

Two recently reviewed publications lay bare our professional image. The first, is an excerpt that could be used to query alumni, practitioners and students in order to determine our own local image. The second, portrays a more intense dilemma for it represents the viewpoint of a government agency and therefore has all the concomitant limitations for redefinition that could provide regular, accurate updating. You can work with your own state in redirecting the title and image of our profession. This is one step toward nationalizing a more accurate description of the MRA (nee L).

Occupational Outlook Quarterly
published by the Department of Labor

Article: Toward Matching Person and Job Characteristics
by Donald Dillon (Winter 1971)

'The 25 occupational characteristics and requirements listed, and defined below are matched in the chart that follows with 268 occupations chosen from the OCCUPATIONAL OUTLOOK HANDBOOK. The information in the chart reflects information obtained from research conducted in the development of the HANDBOOK and a review of literature of job characteristics. This chart is designed as an exploratory tool in helping young people and their counselors pair personal traits, including personal interests, capacities, abilities, tastes and preferences, and educational qualifications with those usually associated with an occupation or group of occupations.'
The 25 occupational characteristics are listed with the "X" indicating those that were marked for the medical record librarian.

1. High level of responsibility
2. Jobs widely scattered  
3. Jobs concentrated in localities
4. Competitive
5. Requires physical stamina
6. Works with detail  
7. Able to see physical results of work
8. Opportunity for self-expression
9. Generally confined to work area
10. Motivates others
11. Overtime or shift work, required
12. Work is closely supervised
13. Directs activities of others
14. Exposed to weather conditions
15. Repetitious work  
16. Helping people
17. Working with ideas
18. Working with people
19. Working with things  
20. Works independently  
21. Works as part of a team
22. College degree  
23. Junior college
24. Technical school or apprenticeship
25. High school diploma
Do you consider yourself fitting this description of working at jobs that are widely scattered, working independently with things, doing repetitious detail work? How many high school counselors would recruit students to this field? What type of students would consider a job with these characteristics?

U.S. Department of Labor, 1965
Dictionary of Occupational Titles

Medical Record Librarian; Code 100.388

'Compiles and maintain medical records of hospital and clinic patients. Reviews clinical records for completeness and contacts medical personnel to obtain missing data.

Codes, indexes, and files records of diagnoses, diseases and treatments, compiles statistics such as reports on admissions, births, deaths and transfers and discharges.

Releases medical information to staff and authorized governmental agencies, insurance companies, physicians, hospitals and medical information research centers.

May brief and transcribe records.

May testify in court to authenticate medical records.

May be registered with American Association of Medical Record Librarians and be known as a Registered Record Librarian.'

In summing up the image created by these two published descriptions, now being used by those outside the profession to determine just what we are, it might be helpful to examine the following statements, '.... statements about occupations should be examined with some care, because often they reinforce what is believed to be true about an occupation in fact they may even influence the behavior of the persons within the occupation itself who find themselves endeavoring to live up to the aspects of the .... stereotype.'

If there is to be a change in our image, we must work with ourselves, our students, our professional colleagues and those outside the profession who need our services and want to know what we are. Start with yourself and widen the circle. Circulate an accurate, factually-based image. Make available to your local library and school counselors, an accurate, current description of an MRA.
Among the allied health professions, the medical record profession should have an image of leadership. The curriculum at the baccalaureate level is one of the few health professional curricula that provides a substantial emphasis on management. In many of the individual programs throughout the United States, including the program at Seattle University, emphasis is also devoted to computerization of health information. The fact that the medical record administrator is prepared to function at the policy-setting level of middle or higher management in a health care facility demonstrates that leadership should be part of the self-image of the medical record profession.

As part of an effort to provide leadership, the project staff developed a curriculum forecast. This forecast was formulated from the current Seattle University bulletin of information. It utilized existing courses to demonstrate what could be accomplished through available resources. While it was only a forecast, not a list of actual programs, it reflects the potential capacity for flexible curriculum design, existent in any university. The following is taken from the published Curriculum Forecast:

*Additional in-depth curriculum development would change and coordinate courses to provide a more meaningful and useful program, but this is a practical attempt to utilize existing facilities and courses to meet the current needs of the health record professional. Course descriptions of the courses used in the outline are not furnished simply because of space limitations. Upon request we will correspond with anyone who wishes to see this Forecast in more detail.
CURRICULUM FORECAST

HEALTH
5 hours Biological Principles
10 hours Anatomy & Physiology
3 hours Health Care Delivery Systems
6 hours Study of Disease-Pathophysiology
2 hours Elementary Pharmacology
0 hours Medical Terminology
Mandatory (not for credit)
Individually programmed course
Pass - Fail Grade
26 QUARTER CREDITS

HEALTH RECORDS
15 hours Health Record Science
(Lab applications could vary according to student interest)
5 hours Statistics
5 hours Introduction to Computers
5 hours Management Practices
3 hours Legal Concepts of Health Field
2 hours Seminar - Current Topics and Organization of Health Facilities
5 hours Practicum
40 QUARTER CREDITS

SEATTLE UNIVERSITY
10 hours English
10 hours History
15 hours Philosophy
(except for Jr., & Sr., transfer students)
10 hours Theology
(except for Jr., & Sr., transfer students)
45 QUARTER CREDITS

26 credits Health
40 credits Health Records
45 credits Seattle University
111 QUARTER CREDITS

+ ONE of 3 programs

HEALTH INFORMATION SCIENTIST*
HEALTH RECORD EDUCATOR AND CONSULTANT*
HEALTH RECORD ADMINISTRATION*

= 180 QUARTER CREDITS
Degree Requirements

*Detailed descriptions of these programs follow on next page.
CURRICULUM FORECAST

HEALTH INFORMATION SCIENTIST
INFORMATION SECURITY CONTROLLERS &
HEALTH INFORMATION RESEARCHER
5 hours Business Law
5 hours College Algebra for Business
5 hours Calculus for Business
5 hours Environmental Economics
5 hours Computerized Health Information Systems
3 hours Computer Research Methods
5 hours Mass Communication
10 hours Methods of Sociological Research I & II
5 hours Advanced Law and Business
48 QUARTER CREDITS

+ 21 hours electives
= 180 QUARTER CREDITS*

HEALTH RECORD EDUCATOR AND CONSULTANT
5 hours Foundations of American Education
5 hours Philosophy of Education
5 hours General Methods, Media & Material
10 hours Science - electives
7 hours Org. & Adm. of Medical Record Dept.
2 hours Seminar - Problem Solving & Man. of Dept.
10 hours Accounting
5 hours Cost Accounting
5 hours Social Science - electives
54 QUARTER CREDITS

+ 15 hours electives
= 180 QUARTER CREDITS*

HEALTH RECORD ADMINISTRATION
7 hours Org. & Adm. of a Medical Record Dept.
2 hours Seminar - Problem Solving & Man. of Dept.
5 hours Org. Theory
5 hours Personnel Management
10 hours Accounting
5 hours Cost Accounting
10 hours Science - electives
10 hours Social Science - electives
54 QUARTER CREDITS

+ 15 hours electives
= 180 QUARTER CREDITS*

* 180 QUARTER CREDITS = DEGREE REQUIREMENTS

SUGGESTED ELECTIVES
5 hours Law of the Press
5 hours Public Relations
5 hours Population
3 hours Genetics
3 hours Population Biology/Ecology

SUGGESTED ELECTIVES
4 hours Speech for the Classroom Teacher
5 hours Business Law
5 hours Educational Sociology
5 hours Factors of Interviewing
5 hours Counseling Interview
5 hours Fundamentals in Speech

5 hours Counseling Interview
5 hours Fundamentals in Speech
5 hours Public Relations
5 hours Business Law
5 hours Factors of Interviewing
From the retrospective viewpoint another problem must be mentioned. That problem is in the area of administering the curriculum of a medical record administration program. Many medical record program directors rely on others with higher academic standing to determine such institutional issues as credit by examination, transfer of credits, waiving of courses that have been completed at a lower level, etc. Unless medical record educators can provide leadership to deans of allied health schools or deans of the schools designated responsible for the medical record program, progression can remain undeveloped and ARTs an untapped source to supplement the small league of RRAs. Medical record educators must be willing to define their profession, set measurable performance standards, educate those around them, and relate through demonstrated decision making that they can provide direction to themselves and others concerned with educational aspects of the medical record profession. Through such demonstrated action, administration of medical record curricula can achieve an identity that evokes confidence in the directions it establishes. One such direction is progression.

It is extremely important that medical record educators take the responsibility of devising methods of providing progression in their own individual schools across the country. Our experience demonstrated that vigorous communication can serve as a recruiting service. The Consortium and SHARE served as media to accomplish a curriculum ladder in the Northwest. Progression is possible and the enrollment in our program at Seattle University has increased. We have corresponded with numerous medical record technician students from all geographic parts of the United States. Since the project started in 1970, we have graduated approximately 25 "progression" students. This is a little under five students a year but does give proof that progression is a reality. ARTs want to progress, and ARTs will progress when provided an opportunity to do so.
VI. CURRENT AND FUTURE DIRECTIONS IN MEDICAL RECORD CURRICULUM;
THE STATE OF THE ART – INNOVATIVE APPROACHES TO PROGRESSION;
CURRENT AND FUTURE DIRECTIONS

The State of the ART – Innovative Approaches to Progression

Seattle University's approach to providing progression has been very flexible. Though a Consortium format, community colleges in the region are kept in tune with curriculum changes at Seattle University and Seattle University faculty are able to help advise community college faculty how to best provide for articulation. Seattle University currently evaluates each ART applicant as an individual and outlines a program to meet his/her needs. Seattle University is providing progression to ART's from one and two year community college programs, hospital schools and the AMRA correspondence course. Direct transfer of credit, waiver exams and challenge exams for credit are utilized.

Other programs have taken a different approach. Mercy College in Detroit has established a 2+2 program. They issue both the associate degree to the medical record technicians and the baccalaureate degree to the medical record administrators.

Students in both programs at Mercy College follow the same first year curriculum. During the second year, students must apply to the Medical Record Administrator Program, if interested, and begin course work for the baccalaureate degree in Medical Record Administration. Since space in the MRA program is limited not all MRT students will be accepted for the MRA program. Students who have been enrolled at Mercy College for the first two years and have a good academic record appear to fit most easily into the MRA program structure. Indiana and Michigan are also using a 2+2 approach and it is being developed in Kentucky.

Florida is trying another approach to improve articulation. Each college and university has been asked to designate common course numbers for all courses in the state. Medical Record Programs in Florida are working together on this request. Courses are to be numbered to reflect the level of the course and ranges of numbers are to be assigned for categories. Therefore, all medical terminology courses in the state might be designated with the same number and transfer of the course from one institution to another would be facilitated.
An AMRA survey in August, 1975, showed the following progression activity in Medical Record Administrator Programs. Twenty of 38 MRA schools responded. In 12 schools, there are a total of 17 juniors who are ART transfers and 25 ART transfer students who are in the senior or fifth year certificate category. Eight of the responding schools had no ART transfer students. Seventeen MRA Programs reported that they were counselling ARTs while three schools reported that they were not counselling ARTs.

<table>
<thead>
<tr>
<th>ARTs Graduated from MRA Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>-----</td>
</tr>
<tr>
<td>8</td>
</tr>
</tbody>
</table>

There are still some roadblocks which inhibit progression. They are:

1. Lack of advising for MRT students about progression possibilities
2. The location of MRT Programs in the "Applied" or vocational divisions in community colleges, which often results in assigning a non-university transfer designation.
3. Lack of well developed and tested waiver/challenge and proficiency exams.
4. Lack of part-time or evening MRA courses for technicians who are employed.

Recommendations to facilitate progression include:

1. Revamping the MRT programs to make the community college and AMRA correspondence course comparable preparation for the field.
2. Redesigning the accreditation examination so that it demonstrates a candidates' knowledge, skills and abilities to perform as a medical record technician.
3. Encouraging regional curriculum planning for articulation and design of curriculum ladders.
4. Provision of non-traditional approaches to progression to aid the working ART and the ARTs who do not have MRA programs in their state.
5. Acceptance of increased responsibility by MRA Program directors to design with their University administration workable, reasonable progression programs.
6. Design of challenge exams for areas in which ARTs may have either formal preparation or job-acquired knowledge and skill.
Current and Future Directions

In the Autumn of 1976, the AMRA will put into effect, a new set of Essentials for Accredited Educational Programs in Medical Record Administration.

The new Essentials will benefit school directors and deans for several reasons. For the first time there is a description of the occupation in the new Essentials. This can be of assistance when schools attempt to recruit, prepare budgetary proposals, restructure intra-school curricula and define course content. The curriculum section of the new Essentials includes a listing of professional course work by topic. This replaces the previous method of specifying credit hours. The new outline provides schools an opportunity to develop individual course outlines and course requirements including credit hour assignment.

At the annual meeting scheduled for September 14, 1976, in Toronto, Canada, the AMRA House of Delegates will vote to approve new Essentials for Accredited Educational Programs in Medical Record Technology. This proposed set of Essentials, unlikely to meet with any disapproval in the HOD, is also an improvement over the previous Essentials for MRT programs. An updated and expanded Description of the Occupation replaces the previous listing featured in a section, entitled, Educational Program. It will provide the same benefits to medical record technicians as those described in the MRA program Essentials. The topical Curriculum section has replaced the previous requirement of clock hour designation for courses. It now allows individual programs to establish their own credit hours for courses.

The two sets of Essentials, one approved and ready for implementation and the other, ready for approval are similar in format, improved in applicability for educational programs and commendable for their flexibility. Individual programs will find the new Essentials much easier to apply. They are an asset to articulation. Another asset to articulation and one that was often discussed during the Curriculum Ladder Project is a scientifically established delineation of roles and functions of medical record personnel.
In June, 1975, the AMRA published a Final Report — A Study to Delineate Roles and Functions of Medical Record Personnel. This document is a result of a contract between the AMRA and the Division of Associated Health Professions, Bureau of Health Manpower, U.S.D.H.E.W. Of particular interest to the progression issue as presented in this publication is the information regarding proficiency testing. Proficiency Testing (PL92-603, Section 1123) is now of major concern to those charged with the responsibility of maintaining a professional direction based on educational methods of determining performance skills or proficiency. This law will inevitably effect the medical record profession. Its intent is to provide mobility/recognition based on performance ability. Credentialing according to competency through academic preparation can be placed in a precarious or null position if and when proficiency testing is enforced through the law. This can be especially true in a field that does not have adequate numbers of credentialed individuals fulfilling current job opportunities. Those of us who are committed to the educational development of our profession should take an active part in the development and use of proficiency tests.

In April, 1976, the AMRA through its Education and Registration Committee announced interest in innovative programs at the baccalaureate level. School directors were asked to communicate their ideas for innovative programs to the Committee. The Northwest Health Record Educators Consortium continued to meet after the completion of the Curriculum Ladder project. In reply to the Committee regarding innovative and experimental approaches to medical record administration, the Consortium made a suggestion related to progression. That suggestion; restructure the AMRA correspondence course for technicians and place it under the direction of existent medical record technician school administration on a regional basis. Another proposal of the Consortium is the development of medical record curriculum based on competency or performance objectives.

As indicated by developing progression programs scattered throughout the country, the future of progression in the medical record profession has a better outlook now than when the curriculum ladder project was undertaken in 1970. Nationally, enrollment is beginning to increase in medical record administration programs making progression at the other end of the ladder a possibility. Table V on page 57 provides a display of all medical record educational program graduates for a 10 year period. With the increase in baccalaureate graduates and the continuing need for medical record educators and medical record administrators with specialty skills, progression at the other end of the curriculum ladder should be considered in future plans. The top end of the curriculum ladder should be developed for those who have the ability to pursue graduate studies. At the bottom of the ladder, consideration should be given to development of progression programs for clerical personnel with experience in health or medical record employment.
TABLE V
ART & RRA GRADUATES - A COMPARISON

<table>
<thead>
<tr>
<th>Total number of students graduating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500</td>
</tr>
<tr>
<td>1400</td>
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<tr>
<td>1300</td>
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<td>200</td>
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<td>100</td>
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</table>

- AMRA Correspondence Course Graduates - ARTs
- School & Hospital Graduates - ARTs
- RRA Graduates
The Consortium concept should be considered for bringing together regional educators to develop progression by the methods we've described as well as new and unique methods. The correspondence course ARTs have the most difficult path to articulation. Since their numbers seem to justify a need for this method of education, the best way to provide articulation to them is probably through establishment of the correspondence course in an academic setting. Any future restructure of the correspondence course should be directed to bringing it into a mode that provides academic credit.

With the implementation of new Essentials for both levels of medical record professional, delineation of the roles and functions of medical record personnel and developing progression programs, the future of medical record curricula is bright. Articulation continues to be a reality and the problem of "dead-ended" technician personnel does have an acceptable solution.
FOOTNOTES

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2 Hanken, Mary Alice, Review and Analysis of the Historical Basis for Progression from Medical Record Technician to Medical Record Librarian, unpublished paper, 1970

3 Guide for Use of Registered Record Librarians and Accredited Record Technicians as Supervisory Medical Record Librarians; American Association of Medical Record Librarians, 1968

4 Annual Report, Education & Registration Committee of the American Association of Medical Record Librarians, October 14, 1968


6 Executive Board Report, Special Committee to Delineate Functions of Medical Record Department, American Association of Medical Record Librarians Delegates Manual, 1969

7 Executive Board Report, op. cit., 2

8 Hanken, loc. cit.

9 Hanken, Mary Alice, Kathleen A. Waters, Proposal - Up the Ladder of Continuing Education; SHARE #3, July, 1971

10 Waters, Kathleen, Mary Alice Hanken, Comparative Study of Courses & Credit Hours in MRA & MRT Programs; SHARE #5, February, 1972

11 Unpublished description of registered medical record administrator and accredited medical record technician, developed by Northwest Health Record Education Consortium, 1971

12 Reding, Beverli, Mary Alice Hanken, Beverly Hooten, Task Analysis: A Tool for Development of Curriculum; SHARE #7, May, 1972

13 Letter to the Chairman, Education & Registration Committee, American Medical Record Association, from Northwest Health Record Education Consortium, April 7, 1973

14 Waters, Kathleen, Mary Alice Hanken, Relationship of Titles to Job Opportunities for MRA & MRT; SHARE #5, February, 1972

15 Hanken, Mary Alice, Topic: Test Construction; SHARE #8, June, 1973
16 Barclay, Martha, ART Progression - A Survey; Medical Record News, February, 1972

17 Barclay, loc. cit.

18 Waters, Kathleen, We've Got An Image, SHARE #8, June, 1973

19 Waters, Kathleen, Mary Alice Hanken, Curriculum Forecast, SHARE #6, March, 1972

20 Report by Laura Biglow, Academic Director, AMRA; 1975 Education Workshop of the AMRA

21 Final Report - A Study to Delineate Roles and Functions of Medical Record Personnel, American Medical Record Association, June, 1975
## COURSES AND CREDIT HOURS

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<th>COURSES</th>
<th>K.R.A.</th>
<th>HRT #1</th>
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MRT Program Only - comparable courses are not offered in Health Record Science (K.R.A.)

### Typing

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**NOTE:**
1. All the figures are computed in quarter hours.
2. Medical Record Science - All subjects that fit the broad classification of Medical Record Science for MRT's are combined in MRS credit hours.
3. Two MRT Programs are 1-year programs; the other 5 are 2-year programs.
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NOTE: 1. All figures are computed in quarter hours.
2. Two MRT programs teach Anatomy & Physiology as a non-lab course.