REGISTERED RECORD ADMINISTRATOR AND ACCREDITED RECORD TECHNICIAN DIRECTORS' COMPETENCY ANALYSIS IN TEXAS ACUTE CARE HOSPITALS

A THESIS

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Date

To the Associate Vice President for Research and Dean of the Graduate School:

I am submitting herewith a thesis written by Gail D. Sanders, entitled "Registered Record Administrator and Accredited Record Technician Directors' Competency Analysis in Texas Acute Care Hospitals." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the Degree of Master of Science, with a major in Health Sciences Instruction.

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The primary purpose of this study was to determine if there were significant differences in tasks performed by Registered Record Administrator and Accredited Record Technician directors of medical record departments in acute care hospitals in Texas. A researcher-developed, Likert-type questionnaire was prepared and mailed out to all 50 - 200 bed acute care hospitals in Texas. The 2-part Likert-type questionnaire included demographic data and frequency of tasks performed. The results of the study indicated that there were no significant differences in tasks performed by Registered Record Administrator and Accredited Record Technician directors of medical record departments in 50 - 200 bed acute care hospitals in the State of Texas.

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CHAPTER 1

INTRODUCTION

Roles and responsibilities of the Medical Record Director have changed significantly over the past 10 years. The medical record profession was directly impacted with the start of the prospective payment system as the medical record became the basis for payment (Green, 1986). The prospective payment system is the method of reimbursement for Medicare and Medicaid patients. Accurate data has become increasingly important.

A qualified Medical Record Director, whether Accredited Record Technician or Registered Record Administrator, may be the key to the financial stability of a hospital today. A determination of whether Accredited Record Technicians and Registered Record Administrators perform the same competencies needs to be made.

Statement of the Problem

The problem of this study was as follows: What is the difference in competencies performed by directors of Medical Record Departments who are Registered Record Administrators and those who are Accredited Record Technicians in Texas acute care hospitals with 50 - 200 beds?

Purpose of the Study

The purposes of the study were as follows:

1. To identify competencies for a job profile of Registered Record Administrators

and Accredited Record Technicians who were Medical Record Directors in 50 - 200 acute care hospitals in Texas.

2. To identify the frequency of competencies performed by Registered Record Administrators and Accredited Record Technicians in the Director's position.

3. To determine if there is a difference in the frequency of competencies for Registered Record Administrators and Accredited Record Technicians as Directors of Medical Record Departments in acute care hospitals.

Hypothesis

The following null hypothesis was tested at the ≤ .05 level of significance: There is no significant difference between frequency of competencies performed by Registered Record Administrators and Accredited Record Technicians in a director's position in a 50 - 200 bed acute care hospital in Texas, as measured by the Registered Record Administrator and Accredited Record Technician Competency Analysis Inventory.

Definition of Terms

The following terms were defined for the purposes of this study:

1. Job Competencies. Work responsibilities of Registered Record Administrator and Accredited Record Technician directors of Medical Record Departments. The term "task", "role", and "profile" will be used synonymously.

2. Registered Record Administrator (R.R.A.) Director. A medical record practitioner who directs the activities in a Medical Record Department in acute care hospitals A person with a baccalaureate degree who has successfully completed the registry examination and is registered by the American Health Information Management Association (A.H.I.M.A.)

3. Accredited Record Technician (A.R.T.) Director. A medical record practitioner who directs the activities in a Medical Record Department in acute care hospitals. An A.R.T. will receive their education through the Independent Study Program or a two year Associate Degree Program and has successfully completed the certification examination administered by A.H.I.M.A.

Assumptions

For the purposes of this study, the following were assumed:

1. Competencies of R.R.A. and A.R.T. Directors of Medical Record Departments can be identified and measured.

2. Respondents answered the questionnaire honestly.

3. The instrument had content validity.

Limitations

The study was limited by the following:

1. Data was collected via a mailout survey. Mailouts are a limitation because only interested persons will return the survey form. Also, they may not answer the survey honestly.

2. Findings were applicable only to the State of Texas.

Significance of the Study

Significance of the study was as follows. This study is needed to:

1. lead to recommendations for exploring curricular changes in the A.R.T. and R.R.A. programs.

2. determine if there is a duplication of competencies by R.R.A.s and A.R.T.s.

3. assist acute care hospitals in deciding whether to hire A.R.T.s or R.R.A.s for director positions if the same competencies can be performed by both.

4. help to determine if there is a need for one level of professional.

5. have an impact on accreditation standards regarding qualifications of the Director of Medical Record Departments.

6. assist the American Health Information Management Association, state associations and local organizations to meet continuing education needs of members.

CHAPTER 2

REVIEW OF THE LITERATURE

A literature review was initiated to determine the differences in competencies performed by directors of Medical Record Departments in acute care facilities who are Registered Record Administrators (R.R.A.s) and those who are Accredited Record Technicians (A.R.T.s). The literature review included various articles regarding job competencies, curriculum designs, competencies described by the American Health Information Management Association, various responsibilities of R.R.A.s and A.R.T.s, and studies performed in other states.

General Information on Job Competencies

Competency statements are general descriptions of practice based on specific tasks or responsibilities identified as those performed in professional practice(Anderson 1983, 21). Once competencies are determined, they may be used to design curricula, certification examinations, and criteria-based job descriptions. Professional education and evaluation needs to be based on roles and responsibilities demonstrated by professionals (Anderson 1983, 21).

Specific Competencies Design in Education

Educators have a variety of ways to choose curriculum design. One of these is the design focused on specific competencies. This is probably the most narrow or limited

design possibility (Winston 1984, 166). All curriculum plans anticipate some type of eventual performance on the part of the learner, but this competency design has a direct relationship between objective, learning activity, and performance.

Winston (1984) stated that the specific competencies design is based on a sequential approach to curriculum development as follows:

1. Identify all tasks or jobs for which preparation should be provided.
2. Determine what needs to be known and done in order to perform the tasks or jobs.
3. Arrange tasks and jobs in appropriate courses.
4. Organize the knowledge and skill for each task or job into a hierarchy.
5. Determine what one needs to know for mastery of each knowledge or skill item (169).

The specific competencies design system is concerned with the "how" and not the "what " of education. In a specific competencies design, performances are stipulated as behavioral objectives, learning activities are planned to achieve each objective, and the learner's peformance is evaluated as a basis for moving from one objective to another. For example, in typing, learners must demonstrate their knowledge of the keyboard before they move on to typing forms. This design is used to teach the basics of reading, mathematics and other skills in elementary, middle, and even high schools (Winston 1984, 196). It is especially common for remedial programs at all levels.

Competency based education has some benefits. This system may help raise academic standards and increase educational achievement. It was developed to achieve specified behaviors in the most efficient manner. Another benefit is that it may prepare students for tasks that life has to offer them.

Many citizens, as well as educators, view competency based education as a way to improve the quality of education (Winston 1984, 192-193). According to Winston (1984) "competency based education, with its performance standards and tests, includes the

argument that both student and teacher performance can be effectively determined" (219).

Competency based education also has some limitations. Critics of competency based education believe that competency based education is boring for students and teachers alike (Gronlund 1985, 288). This design cannot be used alone. It is a tool that must be used along with other types of educational plans such as the subject matter design which is recommended for the biological sciences. The human traits design allows students to develop human traits, learn how to solve problems, and practice leadership skills. The social functions design assists learners in dealing with persistent life situations. Finally, the needs and interests design teaches the learner how to establish a good relationship with peers (Saylor 1981, 252).

Winston (1984) stated "competency based education is more concerned with the narrow issue of skills acquisition rather than with the broader goals of education" (192). The major limitation of the specific competencies design is that it cannot deal with all of education. This design can help individuals learn behaviors, but is limited in helping them develop human traits (Winston 1984, 167).

Other Curriculum Designs

The human traits design teaches self-confidence, how to communicate with others, how to solve problems, and leadership skills. This is a challenging learning design and students must be challenged and do well with learning activities in order to feel satisfied with themselves. The human traits model has some disadvantages. It may be difficult to teach and is very time consuming. It may be expensive to teach and hard to evaluate student's performance (Saylor 1981, 255).

The social functions design is a rather radical design. Some of the social issues that it focuses on are poverty, child care issues, alcoholism and drug abuse, religion, cultural

issues, family planning and health education. This teaching model deals with real life issues.

Some disadvantages of the model are that the students may not be developmentally ready for these type patients. It takes a lot of creativity to teach this model and it is difficult to grade students (Saylor 1981, 253).

The needs and interests design focuses on the needs of the students and their interests. The schools and universities must be flexible when using this design. If the schools did all that the students wanted, the curriculum would be voluminous and faculty members quite numerous (Saylor 1981, 252). The best approach to curriculum planning is to utilize a combination of the competency based, human traits, social functions, and needs and interests designs.

Entry Level Versus Mastery Level Competencies

According to the American Health Information Management Association, upon completion of a medical record technology or medical record administration program, the graduate should have demonstrated the entry-level competencies as defined by the profession. They defined entry-level as graduation from an approved educational program and up to one year of experience (American Medical Record Association 1987, 1). The South Carolina Medical Record Department Study (1985) defined entry-level as three or fewer years of experience in the current position. Mastery level referred to directors with four or more years experience.

The entry-level medical record director would have the fundamental knowledge to perform his or her duties as the director of a medical record department. The mastery level medical record administrator, on the other hand, should be more accomplished and skilled in their duties as the director (American Heritage Dictionary 1975, 804).

American Health Information Management Association

Competencies specify the skills and knowledges needed by practitioners to perform as an Accredited Record Technician or a Registered Record Administrator at entry-level. The important philosophy underlying the development of competencies was that professional education and evaluation should be based on verified roles and responsibilities as demonstrated in professional practice (Amatayakul 1987, 26). The American Health Information Management Association (AHIMA) has been developing role and responsibility definitions since 1957.

The American Health Information Management Association identified tasks as the result of surveying randomly selected practitioners representing a range of experience in a variety of medical record roles. The survey strategy was used to collect statements from medical record practitioners describing current professional roles and specific tasks. Using this source of information, entry-level competencies were prepared.

The AHIMA is committed to ongoing revision of existing entry-level competencies and the identification of new competencies. The Association supports the concept of role-defined practice which is useful to educators, practitioners, employers, and test writers (Anderson 1983, 23). The published competencies provide practitioners with personal guidelines for practice-relevant continuing education activities. The final benefit of entry-level competency revision is the assurance to the public that personal health information is organized and maintained by knowledgeable and skilled health information management professionals.

Responsibilities of Registered Record Administrators

The medical record administrator is the professional responsible for the management of health information systems consistent with professional standards and the medical,

administrative, ethical, and legal requirements of the health care delivery system. The medical record administrator plans and develops health information systems which meet standards of accrediting and regulating agencies, designs health information systems appropriate for various sizes and types of health care facilities, and manages the human, financial and physical resources of a health information service. He or She participates in medical staff and institutional activities including utilization management, risk management, and quality assessment (American Medical Record Association 1987, 1).

The medical record administrator also collects and analyzes patient and facility data for reimbursement, facility planning, marketing, risk management, utilization management, quality assessment, and research. He or She serves as an advocate for privacy and confidentiality of health information, plans and offers inservice educational programs for health care personnel (American Medical Record Association 1987, 1).

The nine entry level competencies for Registered Record Administrators defined by the American Health Information Management Association are as follows:

1. Management--The functions related to planning, organizing, controlling, and evaluating health information services.

    1.1 Establish long and short-range department goals
    1.2 Evaluate progress toward achieving long and short-range department goals.
    1.3 Develop policies for departmental functions.
    1.4 Revise existing policies for departmental functions.
    1.5 Revise existing procedures for departmental functions.
    1.6 Incorporate applicable legal, ethical, accrediting, licensing, certifying, and institutional requirements into departmental policies and procedures.
    1.7 Supervise the implementation of departmental policies and procedures.
    1.8 Solve problems related to policies and procedures.
    1.9 Evaluate the effectiveness of policies and procedures for collecting and processing health information.
    1.10 Plan physical environment of department, including the organization of personnel and equipment.
    1.11 Organize departmental operations to assure cost effectiveness.
    1.12 Recommend changes in existing organizational units of the medical record department as needed.
    1.13 Establish work flow in your area of responsibility within the data collection and processing system.
    1.14 Rearrange work flow within the department after identifying gaps and

overlaps.

1.15 Revise existing work flow in your area of responsibility within the data collection and processing system.
1.16 Establish quantity and quality standards for departmental work.
1.17 Maintain quantity and quality standards for departmental work.
1.18 Perform quality assurance studies for medical record services.
1.19 Supervise quantity and quality of departmental work using established standards.
1.20 Develop forms for administrative use in the medical record department.
1.21 Justify that need for new equipment.
1.22 Supervise directed practice activities for medical record students.
1.23 Prepare pertinent information for medical staff committees.
1.24 Prepare pertinent information for administrative committees.
1.25 Communicate medical record completion problems to designated medical and administrative staff.
1.26 Explain to hospital and medical staff personnel about Diagnosis Related Groups and prospective payment system.
1.27 Apply prospective payment system regulations.
1.28 Instruct physicians regarding Dignosis Related Group regulations (i.e., attestation statements).
1.29 Assess the flow of patient care data within the institution to assure receipt in the medical record department.

2. Legal Aspects--The application of legal principles, policies, regulations, and standards for the control and use of health information.

2.1 Apply applicable legal, ethical, accrediting, licensing, certifying, and institutional requirements needed for data collecting and processing policies and procedures.
2.2 Incorporate applicable legal, ethical, licensing, accrediting, certifying, and institutional requirements into policies and procedures for the control, use and, retrieval of health information.
2.3 Point out to staff policies for the control, use, and release of health information.
2.4 Supervise the control, use, and release of health information.
2.5 Interpret for institutional personnel the applicable legal, ethical, licensing, accrediting, certifying. and institutional requirements for the control, use, and release of health information.
2.6 Monitor the effectiveness of policies and procedures related to the control, use, and release of health information.
2.7 Analyze requests for health information.
2.8 Review forms for obtaining informed consent.
2.9 Interpret for staff the requirements for valid authorizations requesting the release of health information.
2.10 Follow existing procedures for the preparation and use of health information in legal proceedings.
2.11 Apply fees for copying and abstracting information.
2.12 Monitor compliance with specific procedures to ensure that the confidentiality of health information is maintained.
2.13 Enforce procedures to maintain security of computerized information.

2.14 Update policies to conform to evolving medicolegal issues.

3. Personnel Administration--The leadership, direction, and documentation necessary for supervision of personnel.

   3.1 Formulate responsibilities for immediate subordinates.
   3.2 Write job descriptions for departmental positions.
   3.3 Revise (update) job descriptions as needed.
   3.4 Interview personnel for medical record department in cooperation with department head and/or personnel department.
   3.5 Counsel employees regarding employment, performance, promotion, and termination.
   3.6 Comply with affirmative action regulations in hiring and promoting employees.
   3.7 Counsel employees regarding their responsibilities.
   3.8 Point out to staff departmental personnel policies.
   3.9 Enforce health and safety regulations throughout the department.
   3.10 Evaluate the performance of subordinates using established criteria.
   3.11 Develop in-service training programs.
   3.12 Conduct in-service training programs.
   3.13 Plan self-development/continuing education activities.
   3.14 Identify potential job enrichment programs available for subordinates.
   3.15 Conduct in-service training programs in medical records and medical record procedures for other departments (including orientation of medical staff).

4. Health Information Systems--The definition and application of techniques used in the development and implementation of health information systems.

   4.1 Review policies for collecting and processing health information.
   4.2 Assess existing procedures for collecting and processing health information.
   4.3 Apply existing policies for collecting and processing health information.
   4.4 Apply procedures for collecting and processing health information.
   4.5 Supervise health data collecting and processing activities (e.g., supervise coding, indexing, and statistics.)
   4.6 Update health data collecting and processing systems to assure that data meets institutional needs.
   4.7 Evaluate an automated system for collecting and processing health information for primary and secondary records.
   4.8 Analyze the effectiveness of a computerized health information system.
   4.9 Supervise data collection and retrieval from computerized health information system.
   4.10 Coordinate the flow of information among the various levels of care in the health care delivery system.

5. Health Records--The definition and application of techniques necessary to assure adequate documentation of health care.

5.1 Review policies for quantitative analysis of health records.
5.2 Revise procedures for quantitative analysis of health records.
5.3 Monitor the accuracy of quantitative analysis of health records.
5.4 Revise procedures for qualitative analysis of health records.
5.5 Supervise health record analysis.
5.6 Audit performance of departmental personnel in conforming to policies for timely completion of health records.
5.7 Carry out concurrent medical record review activities.
5.8 Maintain manual or automated incomplete record control system.
5.9 Supervise the incomplete record control system.
5.10 Evaluate primary health records to determine if they meet institutional needs.
5.11 Evaluate primary health records to determine if they fulfill reimbursement requirements.
5.12 Contribute to the formulation of hospital policies, rules, and regulations regarding the content of health records (i.e., medical or clinical records).
5.13 Review the content of existing forms for primary records.
5.14 Evaluate the content of existing forms for secondary records.
5.15 Evaluate the effectiveness of forms to meet new institutional needs.
5.16 Recommend new developments in health records and health data systems for members of the medical record committee and appropriate staff members.

6. Information Retention and Retrieval--The definition and application of techniques for filing, maintenance, and acquisition of primary and secondary health information.

6.1 Recommend the space and equipment for filing, storage, maintenance, and retrieval of health information.
6.2 Plan effective methods for record retention.
6.3 Follow existing procedures for retention of health information.
6.4 Point out to staff existing policies for the retention of health information.
6.5 Interpret policies for the retention of health information to staff.
6.6 Appraise existing procedures for the retrieval of health information.
6.7 Supervise health information retrieval activities.
6.8 Supervise the filing and maintenance of active and inactive primary records.
6.9 Organize secondary records to assure that they meet institutional needs.
6.10 Supervise the filing and maintenance of indexes and other secondary records.

7. Health Statistics--The acts of collecting, computing, analyzing, interpreting, and presenting numerical data relating to health care services.

7.1 Maintain information needed to fulfill specific health information reporting requirements related to applicable legal, licensing, and accreditation requirements.
7.2 Apply control procedures to assure the accuracy, consistency, and com-

pleteness of statistical data.
7.3 Retrieve data from health records for research projects, special studies, and educational programs.
7.4 Prepare administrative and clinical statistical reports.
7.5 Communicate data from administrative and clinical statistical reports.
7.6 Evaluate information collected in research projects and special studies.

8. Quality Assurance Systems--An organization of activities which provides the process for reviewing and evaluating health care services

8.1 Follow institution's policies and procedures for quality assurance.
8.2 Identify information for use in the institution's quality assurance studies.
8.3 Retrieve information for institution's quality assurance studies.
8.4 Abstract health care data for patient care evaluation.
8.5 Retrieve information for patient care evaluation studies.
8.6 Apply generic screening criteria for concurrent medical record review.

9. Classification and Indexing Systems--Activities in which medical record professionals code, classify, and index diagnoses and procedures for purposes of standardization, retrieval, and statistical analysis.

9.1 Supervise health data collection and processing (e.g., coding, indexing, and statistics).
9.2 Develop policies and procedures for coding diagnoses, procedures, and symptoms.
9.3 Develop departmental coding policies and procedures.
9.4 Maintain control procedures to assure accuracy and completeness of coded information.
9.5 Monitor the accuracy of coding.
9.6 Monitor the accuracy of the selection of the principal diagnoses.
9.7 Follow Federal regulations and the American Health Information Management Association guidelines to sequence diagnoses.
9.8 Perform Diagnosis Related Group assignment utilizing automated grouper or decision trees.
9.9 Justify coding decisions (American Medical Record Association 1987, 1-5).

Responsibilities of Accredited Record Technicians

The medical record technician possesses the technical knowledge and skills necessary to maintain components of health information systems consistent with the medical, administrative, ethical, legal, accreditation, and regulatory requirements of the health care delivery system. In all types of facilities, and in various locations within a

facility, the medical record technician processes, maintains, compiles, and reports health information data for reimbursement, facility planning, marketing, quality assessment, and research (American Medical Record Association 1987, 1).

He or she abstracts data, codes clinical data using appropriate classification systems, and analyzes health records according to standards. The medical record technician may be responsible for functional supervision of the various components of the health information system (American Medical Record Association 1987, 1).

Entry-Level competencies for Accredited Record Technicians as defined by the American Health Information Management Association (1987) are as follows:

1. Management--The functions related to planning, organizing, controlling, and evaluating health information services.

    1.1 Apply existing policies for departmental functions.
    1.2 Follow existing procedures for departmental functions.
    1.3 Maintain work flow in your area of responsibility within the data collection and processing system.
    1.4 Follow work flow within the department to identify gaps and overlaps.
    1.5 Revise existing work flow in your area of responsibility within the data collection and processing system.
    1.6 Maintain quantity and quality of departmental work using established standards.
    1.7 Perform quality assurance studies for medical record services.
    1.8 Apply prospective payment system regulations.
    1.9 Explain to superiors the need for new equipment.

2. Legal Aspects--The application of legal principles, policies, regulations, and standards for the control and use of health information.

    2.1 Apply existing policies for the control, use, and release of health information.
    2.2 Follow existing procedures for the control, use, and release of health information.
    2.3 Follow specific procedures to ensure that the confidentiality of health information is maintained.
    2.4 Follow procedures to maintain security of computerized information.
    2.5 Follow procedures for handling authorizations requesting the release of health information to assure validity.
    2.6 Respond to requests for health information.
    2.7 Select appropriate information for release.
    2.8 Follow existing procedures for the transmittal of health information to and

from other health care facilities upon transfer of a patient.
2.9 Follow existing procedures for reporting health information as required by applicable legal, accrediting, licensing, and certifying regulations.
2.10 Follow existing procedures for the preparation and use of health information in legal proceedings.

3. Personnel Administration--The leadership, direction, and documentation necessary for supervisory of personnel.

3.1 Write job descriptions in your area of responsibility.
3.2 Revise (update) job descriptions as needed.
3.3 Apply existing departmental personnel policies.
3.4 Plan self development/continuing education activities.

4. Health Information Systems--The definition and application of techniques used in the development and implementation of health information systems.

4.1 Apply existing policies for collecting and processing health information.
4.2 Follow existing procedures for collecting and processing health information.
4.3 Follow existing procedures for the manual or automated issues of patient I.D. numbers.
4.4 Input data into computerized health information systems.
4.5 Apply existing policies for the retention of health information.

5. Health Records--The definition and application of techniques necessary to assure adequate documentation of health care.

5.1 Evaluate primary health records to determine if they meet institutional needs.
5.2 Review secondary records to determine if they meet institutional needs.
5.3 Carry out concurrent medical record review activities.
5.4 Follow the flow of patient care data within the institution to assure receipt in the medical record department.
5.5 Follow procedures to compile primary health records.
5.6 Apply existing policies for quantitative analysis of health records.
5.7 Follow existing procedures for quantitative analysis of health records.
5.8 Monitor accuracy of quantitative analysis of health records.
5.9 Follow existing procedures to ensure timely completion of health records by departmental personnel.
5.10 Report problems with forms usage.
5.11 Maintain manual or automated incomplete record control system.
5.12 Maintain a locator file and sign-out system for incomplete records.
5.13 Prepare report of the number of physicians' incomplete records for designated medical and administrative staff.

6. Information Retention and Retrieval--The definition and application of techniques

for filing, maintenance, and acquisition of primary and secondary health information.

6.1 Maintain existing manual or automated filing systems for active and inactive primary records.
6.2 Supervise the filing and maintenance of active and inactive primary records.
6.3 Maintain existing manual or automated filing systems for indexes and other secondary records.
6.4 Maintain existing manual or automated systems for the retrieval of health information.
6.5 Apply existing policies for the retrieval of health information.
6.6 Follow existing procedures for the retrieval of health information.
6.7 Follow existing procedures for the retention of health information.
6.8 Follow existing procedures for the destruction of health records.

7. Health Statistics--The acts of collecting, computing, analyzing, interpreting, and presenting numerical data related to health care services.

7.1 Follow existing control procedures to assure the accuracy, consistency, and completeness of statistical data.
7.2 Abstract health records for the collecting and processing of statistical data.
7.3 Abstract data from health records for research projects, special studies, and educational programs.

8. Quality Assurance Systems--An organization of activities which provides the process for reviewing and evaluating health care services.

8.1 Follow institution's policies and procedures for quality assurance.
8.2 Retrieve information for institution's quality assurance studies.
8.3 Retrieve information for patient care evaluation studies.

9. Classification and Indexing Systems--Activities in which medical record professionals code, classify, and index diagnoses and procedures for purposes of standardization, retrieval, and statistical analysis.

9.1 Follow departmental coding policies and procedures.
9.2 Follow existing procedures for coding diagnoses, procedures, and symptoms.
9.3 Code diagnoses, procedures, and symptoms for data collection and processing.
9.4 Follow existing control procedures to assure accuracy and completeness of coded information.
9.5 Follow Federal regulations and the American Health Information Management Association guidelines for sequencing of diagnoses.
9.6 Apply definitions and guidelines to determine the principal diagnosis.
9.7 Perform Diagnosis Related Group assignment utilizing automated grouper or decision trees.

9.8 Audit health data collection and processing activities (e.g., coding, indexing, and statistics) (American Medical Record Association 1987, 1-3).

Differences in Competencies for Registered Record Administrators and Accredited Record Technicians

In comparing the 9 entry-level competencies for Registered Record Administrators (R.R.A.s) and Accredited Record Technicians (A.R.T.s), some major differences were found (American Medical Record Association 1987). The R.R.A.s management competency includes 29 subpoints, whereas the A.R.T.s included only 9. The R.R.A.s management competency was at a higher performance level than was that of the A.R.T. The R.R.A.s legal aspects competency has 14 subpoints, with the A.R.T.s having 10. The competency has the R.R.A. applying, supervising, interpreting, and analyzing procedures, while the A.R.T.s legal aspects competency has them following procedures.

The personnel administrative competency for the R.R.A. has 15 subpoints while the same for the A.R.T. has 4 subpoints. The R.R.A.s personnel administrative competency reveals the R.R.A. interviewing, hiring, counseling, evaluating employees, as well as conducting in-service programs. The A.R.T.s personnel administrative competency has them only writing and revising job descriptions, applying policies, and planning continuing education activities.

The health information systems competency for R.R.A.s has 10 subpoints, whereas the A.R.T.s competency has only 5. This competency has the R.R.A. reviewing and applying policies, supervising and updating health data collection, evaluating and analyzing automated systems, etc. The same competency for A.R.T.s has them mainly applying existing policies, following existing procedures for collecting health information, and inputting data into computers.

The fifth competency, health records, has 16 subpoints for the R.R.A. and 13 for the

A.R.T. Once again, the R.R.A. is revising policies and procedures for record analysis, evaluating records, and making recommendations to committees and staff members regarding records. The A.R.T., on the other hand, is following and applying existing policies and procedures.

The information retention and retrieval competency has 10 subpoints for the R.R.A. and 8 for the A.R.T. The R.R.A. competency reveals them to be in a more supervisory capacity, while the A.R.T. again is following existing policies and procedures.

The seventh competency, health statistics, has 6 subpoints for the R.R.A. and 3 for the A.R.T. The R.R.A.s competency has them retrieving data for research projects, preparing statistical reports, communicating and evaluating information collected. The A.R.T. is mainly abstracting data for studies.

The quality assurance competency has 6 subpoints for the R.R.A. and 3 for the A.R.T. For the R.R.A.s and A.R.T.s, the main thrust for both is retrieving and abstracting data for quality assurance activities. This competency is the only one which has similar functions for both the R.R.A. and the A.R.T.

The final competency, classification and indexing systems, has 9 subpoints for the R.R.A. and 8 for the A.R.T. Once again, the A.R.T. is following departmental policies and procedures and coding diagnoses while the R.R.A. is developing policies and procedures and monitoring coding accuracy.

Upon review of the 9 competency areas, it appears that the R.R.A. competencies are at a higher developmental level than are the A.R.T. competencies. According to Taylor (1985) "R.R.A.s and A.R.T.s tend to perform at 4 levels--synthesis by revising existing procedures; evaluation through evaluating and describing to staff existing procedures; analysis by outlining existing procedures; application of existing procedures. Synthesis is at the highest developmental level with application at the lowest" (33).

Educational Preparation of the Medical Record Director

The medical record field offers many job opportunities to A.R.T.s and R.R.A.s. In today's job market, employers are looking for confident, competent, knowledgeable and experienced personnel (Love 1992, 7). Upon graduation from an accredited program, medical record professionals, whether A.R.T. or R.R.A., may not be as prepared to handle certain positions as they initially thought. According to Jackson (1992) stronger personnel management skills were needed as an assistant director of a medical record department than classroom experience taught her (6).

No program can totally prepare the medical record professional for all they will encounter in today's working world. Sometimes, one gets the best management experience from trial-and-error on the job training (Jackson 1992, 6).

The areas of increased demand for professionals in the medical record field are coding and Diagnosis Related Group optimization (Jackson 1992, 7). Competition in the medical record field can run high depending on the number of A.R.T. and R.R.A. programs in the area. Both A.R.T.s and R.R.A.s may be qualified for the opportunities available in today's job market.

A.R.T. Pilot Project--The Historical Review

Some individuals at the associate degree level have had a desire to progress in their career field. During the late 1970s a number of allied health professionals who were credentialed at the technical or non-baccalaureate level, were seeking recognition from their credentialing agencies for the knowledge and skills they had acquired through employment and continuing education. They were wanting to progress to the baccalaureate level (Reding 27, 1981).

The need for professional associations to provide alternate ways for advancement

prompted federal interest in the early 1970s. Federal legislation specified that equivalency and proficiency examinations be developed by some allied health professionals as a way for giving recognition for knowledge and skills acquired through employment (Reding 28, 1981).

The American Medical Record Association (A.M.R.A.) recognized that A.R.T.s with baccalaureate degrees were interested in occupational advancement. In 1978, the A.M.R.A. Board of Directors appointed a task force to recommend methods whereby A.R.T.s with baccalaureate degrees could write the registration examination without being required to go through the medical record administration program.

The task force recommended that a pilot project be conducted by the A.M.R.A. in order to measure the extent of advanced knowledge gained by A.R.T.s through experience (Reding 1981, 28). The recommendation was made that A.R.T.s with a baccalaureate degree in an unrelated field and 4 years experience be allowed to write the registration examination in 1979. The rationale for the recommendation was that the results should provide a basis for determining the equivalency between experienced A.R.T.s and entry-level R.R.A. knowledge and skills.

A group of randomly selected A.R.T.s was allowed to take the test. The 150 A.R.T.s who took the test also completed a questionnaire about their employment experience, education, and other demographic data.

The registration examination consisted of 250 multiple choice questions which were designed to measure entry-level R.R.A. knowledge skills. The A.R.T.s wrote the examination in the same physical surroundings as the R.R.A. candidates. No special arrangements were made for the A.R.T.s and all subjects received the same test.

Of the 150 A.R.T.s taking the examination, 79 or 52.7% passed and 82.4% of the R.R.A.s passed the exam. The A.R.T.s lowest performance was in data processing and

the highest in medical record science. A.R.T. mean score performance did not exceed R.R.A. mean score in any subject area. Graduates of 1 and 2 year college-based programs achieved higher scores than graduates of the correspondence course and hospital-based programs (Reding 1981, 30). The question posed in the past, just as in the present and future is, how do we differentiate between entry-level knowledge and skills for the A.R.T. and R.R.A. practitioners?

South Carolina Medical Record Department Study

A South Carolina study compared roles and responsibilities of entry level and experienced medical record department directors. Overall, the data revealed few statistically supported differences in the health information management roles and responsibilities (Taylor 1985, 33). According to Taylor (1985) only 2 of the 27 categories were significantly different. A question regarding word processing services revealed that 69% of A.R.T.s perform at the evaluation level, while 53% of the R.R.A.s perform at this level. This may be significant in that a higher percentage of A.R.T.s were performing at the evaluation level than were R.R.A.s. One would expect the opposite to be true (Taylor 1985, 35). Also, 19% of A.R.T.s supervise word processing as compared to 35% of R.R.A.s.

A.R.T.s were found to perform at four different levels--synthesis, analysis, application, and evaluation. Less variety was seen with the R.R.A. respondents. These performed only at the higher synthesis and evaluation levels. It was interesting that so many respondents utilized knowledge at the application level when it might be expected that more medical record department directors would be performing at the synthesis and evaluation levels (Taylor 1985, 35).

The study's first hypothesis was that the degree of educational preparation had no

influence on the department director's management roles and responsibilities. This was supported through the data that were collected. The second hypothesis, that experience had no influence on the roles and responsibilities, also was supported. Most experienced directors supervise and evaluate health data collection and processing activities, while entry-level director's responses varied more widely and included an analysis level of performance. Although the data gathered in this study do not provide conclusions about the roles and responsibilities of South Carolina medical record directors, the data do indicate that the A.R.T.s and R.R.A.s can expand their roles and elevate their performance levels.

American Medical Record Association Manpower Survey

The purpose of the 1986 American Medical Record Association Manpower Survey was to establish a data base from which to provide information on compensation, staffing patterns, and productivity within the medical record department. This, in turn, provided American Medical Record Association members information on salary levels, work responsibilities, and other issues of a medical record department (Amatayakul 1987, 25).

It was noted in the study that medical record department directors have more day-to-day activities in a department setting with fewer discharges and/or in smaller facilities, whether A.R.T. or R.R.A. Directors in larger facilities with more discharges have other managers who perform hands-on functions with the records and have little one-on-one contact with employees.

For this study, the director-respondents reported that 97% of the other managerial positions were held by credentialed medical record professionals, with a majority of these being R.R.A.s. The transcription supervisor was the most commonly reported other manager in the medical record department with 130 A.R.T.s and 289 R.R.A.s in this area

of responsibility. The coding and abstracting supervisor was the next most common managerial position with 42 A.R.T.s and 68 R.R.A.s. The record retrieval and filing position indicated that there were 21 A.R.T.s and 73 R.R.A. managers.

It was interesting to note that only 10 A.R.T.s managed the coding and abstracting/Diagnosis Related Group Coordination, whereas 41 R.R.A.s managed this crutial area of the medical record department. Under the pressures of the Prospective Payment System, hospitals have filled these positions with experienced medical record professionals who can interact with coding, administrative and the medical staff.

Members of the American Medical Record Association were surveyed in 1989 to determine positions held, responsibilities and salary information. The survey revealed that most respondents had multiple areas of responsibility. Many respondents had six major duties, coding, abstracting, deficiency analysis, release of information, statistics, and quality assessment. However, management versus actual performance of the functions was not distinguished.

Of the members who responded, 71% were employed in traditional positions at acute care facilities. Of the respondents in the director's position, 636 were A.R.T.s and 716 were R.R.A.s (Johns and Blide 1990, 34). This study revealed that while many maintained membership in the association, they were employed in settings not related to medical records. Results indicated that career opportunities for American Health Information Management Association members were expanding into all facets of business, industry, education, and health care. According to the survey, small hospitals tended to hire A.R.T.s as directors, but large hospitals preferred R.R.A. directors.

Innovations and Research Review Study

In 1987 the Council on Certification conducted a study to determine the roles and

responsibilities of entry-level A.R.T.s and R.R.A.s. The study resulted in 63 identified responsibilities for A.R.T.s and 115 for R.R.A.s. In addition to identifying the roles and responsibilities, the data were analyzed to determine if a difference exists between entry-level responsiblities of A.R.T.s and R.R.A.s. Forty-three tasks were examined. A significant difference was found between 26 of the 43 tasks examined. It was indicated that the difference in the 26 cases could be attributed to a greater number of entry-level R.R.A.s performing these tasks than the number of entry-level A.R.T.s performing the same tasks.

A random sample of 400 R.R.A.s and 400 A.R.T.s was drawn from a total population of 1,951 entry-level practitioners. Separate questionnaires were sent to A.R.T.s and R.R.A.s for this particular study. The questionnaires were similar in that both contained identical demographic information and some similar job-task questions, but other task related questions were unique to the A.R.T.s and R.R.A.s on their respective surveys. The surveys were similar enough that comparisons could be made of the two.

The significant difference between A.R.T.s and R.R.A.s performing entry-level tasks indicated that a relationship existed between the type of certification and types of tasks performed at entry-level. The differences reported were not surprising when individual task blocks were reviewed. The tasks in these blocks were, for the most part, managerial in nature. The survey revealed that 73% of the R.R.A.s were employed in a managerial capacity as compared to only 34% of the A.R.T. respondents (Johns and Blide 1990, 70).

Changing Role of the Medical Record Professional

"For many health-care professionals, the search for effective methods of accessing and delivering information has become increasingly challenging" (Johnson 1992, 12).

The medical record profession has changed significantly in recent years. For change to be managed effectively, some existing rules or patterns must be overcome. One of these is that paper is the chosen method for information distribution and retention. Another rule that needs changing is the more documentation, the better the chart. The medical record director is viewed as a librarian. Other rules are that the medical record department is an overhead line item on the budget and that physicians are not part of the medical record process (Johnson 1992, 12).

We are beginning to see these rules and patterns change. Medical records need to be computerized. Only clear, concise information needs to be in the patient's chart. The medical record director is one of the chief information officers. The medical record department is a major revenue producing department and physicians are being educated to properly dictate and use information in the record (Johnson 1992, 12).

Over the past years, the medical record for a typical inpatient stay has grown from 20 to 30 documents to more than 150 documents (Johnson 1992, 13). While the quantity of documents has increased, it is questioned whether there has been an increase in the quality of care provided. A record may have so many pages of information that the health care provider has difficulty locating what is actually wrong with the patient and what treatment will be most effective.

According to Johnson (1992) how the medical record professional structures the patient chart is important. The physician should have information readily available. Clinical research and data gathering will also be more effective.

Planning a computerized record will be more effective in reducing the number of images in the medical record. The challenge will not be to create more paper, but to improve the quality of information to create the perfect sets of data for each patient visit (Johnson 1992, 13).

Resources must be maximized in all departments. The medical record department, laboratory, radiology, and other departments should all be involved in forms design in order to improve the form itself, as well as the quality of information.

Optical-disc technology, high-density magnetics, microfilm and other technologies are part of the future of the medical record professional (Johnson 1992, 13). Medical record professionals must be prepared for this changing future.

Future Predictions

Medical record employment opportunities abound. Since the inception of Diagnosis Related Groups (DRG), the role of the medical record professional has reached the forefront of hospital management (Carroll 1992, 10). DRGs have moved much of the medical practice toward ambulatory care and decreased lengths of stay. DRGs have also opened new career opportunities for medical record professionals. This has made A.R.T.s and R.R.A.s a more respected member of the health care team.

R.R.A.s and A.R.T.s are no longer just employed in traditional settings such as acute care or long-term care facilities. They work for computer companies, consulting firms, government agencies, home health agencies, insurance companies, pharmaceutical companies, prisons and veterinary hospitals (Carroll 1992, 10).

Two of the fastest growing areas in health service are physician offices and outpatient care facilities. The future looks bright for medical record professionals who have become respected members of the health-care profession.

Council on Certification--AHIMA

The Council on Certification (COC) of the American Health Information Management Association (AHIMA) has the responsibility of preparing and administering

certification examinations for entry-level medical record professionals. In order that the examinations are relevant to current practice, competencies of entry-level medical record professionals should be updated at least every 5 years. They are updated more often if rapid changes occur in the profession (Johns and Blide 1991, 1).

In 1981 the American Medical Record Association (AMRA) adopted a competency based approach to education and for the national testing for admission into the profession. This approach was based on competency statements that entry-level practitioners should possess to perform successfully on the job (Johns and Blide 1991, 1). These competencies needed to be reviewed and updated as changes were made in the profession.

AMRA conducted research projects as long ago as 1955 in order to delineate the roles and responsibilities of medical record professionals. A 1978 roles and functions study resulted in 9 major content areas common to both R.R.A.s and A.R.T.s. In addition, this study identified 44 R.R.A. and 43 A.R.T. responsibilities (Johns and Blide 1991, 2).

In 1981 AMRA conducted a study that looked at entry-level R.R.A.s and A.R.T.s one year after certification. The result of this study was 100 R.R.A. and 62 A.R.T. responsibilities which were used to develop the competency statements used for test development.

In 1987 another study was completed. The 1987 competency statements were the product of this research. AMRA then suggested that the1987 competency statements be updated. This project was scheduled for completion in 1991.

The purpose of the 1991 study was to gather information that would assure that the job analysis would accurately reflect the activities of the entry-level practitioners. Data were collected on the types of tasks performed, frequency of tasks performed, and

criticalness of tasks to overall job performance. The roles and functions of the medical record practitioners were identified using information from literature, input from experts in the field, and input from entry-level practitioners themselves. All A.R.T.s and R.R.A.s with 1 year work experience were surveyed (Johns and Blide 1991, 6).

AMRA felt that with the rapid changes in the medical record profession, it was necessary to take a closer look at roles and responsibilities. They felt that it was no longer appropriate to address the profession from the perspective of the 9 traditional content areas of management, legal aspects, personnel administration, health information systems, health care records, information storage and retrieval, health statistics, quality assurance, and classification and indexing systems (Johns and Blide 1991, 7).

Instead, they felt that it was necessary to look beyond content areas to examine how health information is managed in both a manual and computerized environment. The study would thus provide for the development of a Model of Practice for the entry-level practitioner.

A mail survey method was used. All individuals who had passed the accreditation and registration examinations in 1989 were sent surveys. An expert panel was used to generate task statements. The results of the review by the panel yielded 4 domains of practice, 7 major task areas and 94 subtasks.

Of the 1,779 credentialed A.R.T.s and R.R.A.s who were sent surveys, 1,299 returned them. In almost all of the returned surveys, there were sections with no response. A large percentage of the respondents were employed in acute care facilities. Little difference was seen geographically for A.R.T.s and R.R.A.s, except that 50.3% of the R.R.A.s worked in metropolitan areas while 42.9% of A.R.T.s were employed in similar areas (Johns and Blide 1991, 17).

Facility bed size data had little significance since 33% of the respondents did not

complete this question. The only observation made was that R.R.A.s appeared to be employed in greater numbers in larger facilities.

Means were reported for each subtask, task, and domain. R.R.A.s indicated that they were performing the subtasks in 6 of the 7 task categories more frequently than the A.R.T.s. The R.R.A.s also indicated that they considered the associated subtasks more important to their overall job performance than A.R.T.s. did.

They felt that it was not only important to determine the percentage of persons performing the tasks, but also to report percentages of tasks not performed. It was recommended that a task which was not being performed by 75% of the practitioners or was not considered important by 75% of the practitioners, be reviewed by a panel to determine if it should be included in the examination specifications. Of the 94 subtasks, 13 tasks were considered unimportant by the A.R.T. respondents while 1 was considered unimportant by the R.R.A. respondents.

Analysis of results of the study revealed that entry-level R.R.A.s more frequently performed tasks related to domains 2 and 4 and felt that these tasks were important to overall job performance. The 4 domains are as follows:

Domain 1: Assess institutional and patient-related information needs and departmental (i.e. medical record, quality assurance, cancer registry or similar department) information, service, and operational needs.

Domain 2: Design and select departmental service and operational systems, and information systems for patient-related data.

Domain 3: Implement departmental service and operational systems, and information systems for patient-related data.

Domain 4: Evaluate departmental, operational, and service systems, and information systems for patient-related data (AHIMA 1992, 1-9).

A relatively small number of variables contributed to a significant difference between the A.R.T. and R.R.A. tasks. While this may suggest that entry-level A.R.T.s and R.R.A.s may not be distinguishable from one another, the results should be interpreted carefully due to methodological limitations (Johns and Blide 1991, 63). Overall, they were able to separate the professional levels of A.R.T. and R.R.A. to a statistically significant degree.

While both levels perform a range of tasks from technical to managerial, the differences were most apparent with regard to managerial and information management functions. The entry-level A.R.T. usually performs in the role of data collection. The R.R.A. usually performs in the area of data validation and analysis.

Entry-level A.R.T.s are more likely to perform functions related to supervision and the execution of plans than they are to perform functions associated with the planning and design of systems. R.R.A.s consider supervisory and management tasks as equally important.

A.R.T.s perform a diversity of tasks. Findings of the study were that generally tasks performed by A.R.T.s included those which were technically oriented or supervisory in nature. Some of the tasks performed included gathering data, coding, concurrent medical record review, monitoring release of information, and abstracting data from records. They develop plans, goals, objectives, and develop policies and procedures. A.R.T.s also evaluate employee performance.

The R.R.A. tasks were varied. They included technical, managerial and information management functions. The entry-level R.R.A. performs tasks related to planning information systems. Some of these tasks are clinical and some technically oriented. The R.R.A. is involved with the development of plans, goals and objectives for the department. R.R.A.s develop budgets, goals, objectives, and is involved in planning for

computerization. The entry-level R.R.A. also determines personnel and equipment needs. There are a myriad of other responsibilities for the R.R.A.

The 1991 Job Analysis Validation Study provided new insight into the profession of medical records at entry-level. Domains of practice, tasks and subtasks were identified to replace the 1987 competency statements. Test specifications for credentialing R.R.A.s and A.R.T.s were also developed (Johns and Blide 1991, 83).

SUMMARY

Competency statements were developed for R.R.A.s and A.R.T.s by the American Health Information Management Association in order that health information managers remain skilled and knowledgeable in their areas of responsibility. Upon review of the entry-level competencies for R.R.A.s and A.R.T.s, it appears that the R.R.A. competencies are at a higher developmental level than are the A.R.T. competencies. Various studies performed in other states indicate that R.R.A.s should be performing at a higher developmental level than the A.R.T.s. Many new and exciting employment opportunities are offered to medical record personnel now and also into the future. The American Health Information Management Association is committed to ongoing revision of existing entry-level competencies and identification of new competencies to assure the public that personal health information is organized and maintained by knowledgeable health information management professionals (Anderson 1983, 23).

CHAPTER 3

METHODOLOGY

The methodology of this descriptive study, using a mail survey technique, is discussed in relation to its population, instrument used to measure the variables, and procedures used to collect the data. Statistical techniques that were used in this study are also discussed in this chapter.

Population and Sample

The population for this study was Registered Record Administrators (n=242) and Accredited Record Technicians (n=309) who serve as Texas Directors of Medical Record Departments in acute care hospitals (N=551). A sample of convenience was chosen from a list of hospitals in the American Hospital Association Guide, 1990. Surveys were sent to196 medical record directors. All hospitals (196) with 50 - 200 beds were sent surveys. Participants who were both A.R.T. and R.R.A. were considered in the R.R.A. group.

Collection of Data

A packet which included the survey, preaddressed, postage paid envelope, and cover letter (see Appendix A) were mailed out to the R.R.A.s and A.R.T.s on May 19, 1992. They were given 4 weeks to mail back the survey. The respondents were requested to mail back the survey even if they did not participate or did not qualify as a participant.

A follow-up mailing to the A.R.T.s and R.R.A.s was performed on June 20, 1992. It

included another survey, a preaddressed, postage paid envelope, and a follow-up cover letter (see Appendix B). The follow-up surveys were sent to medical record directors who had not returned the first survey. The subjects were to return this follow-up within three weeks. No surveys were considered after July 4, 1992.

Protection of Human Subjects

Surveys were coded for follow-up purposes. A five digit number was used as a code. The first two digits identified the hospital and the last three identified the respondent. Completion and return of the questionnaire indicated consent and participation was voluntary. No names were used in the study. Only group data were used.

Instrumentation

The two-part investigator-made survey (see Appendix C) was developed. Mail-out surveys have advantages and disadvantages. Some advantages are that they are convenient and have respondent privacy. They are relatively low in cost to implement. Some disadvantages are that they are time consuming due to having to follow-up on them. Also, some bias may result, in that some respondents may not answer the questions honestly. Mail surveys also have low response rates due to lack of interest on the part of the respondent or the time involved in completing the survey.

With any questionnaire, validity is an important consideration. Internal validity is the freedom from bias in forming conclusions in view of the data. External validity deals with whether the conclusions drawn from a sample can be generalized to other cases.

The survey was reviewed by one academic professor in the medical record field prior to mailing it out. However, it was not reviewed by director of medical record departments. Therefore, content validity was not thoroughly determined prior to its use.

Part I of the survey asked questions about demographic information concerning the participant's employing institution and their educational background. Part II of the survey identified specific roles and responsibilities performed by medical record department directors as health information managers. The roles and responsibilities for Part II of the survey were chosen utilizing the American Health Information Management Association's entry-level competencies for R.R.A.s and A.R.T.s. Of the 28 questions on the survey, 18 were taken from the R.R.A. set of competencies and 13 from the A.R.T. competencies. Questions numbered 24, 26, and 28 were retrieved from both the A.R.T. and R.R.A. competencies (see Appendix D). Therefore, the survey appears to be representative of both the A.R.T. and the R.R.A. tasks. The questions were chosen using a sample of convenience.

The survey was a Likert-type instrument used to determine the frequency of responsibilities performed by the medical record directors. The Likert scale is a widely used self-report method for measuring attitudes. It lists clearly favorable and unfavorable attitude statements (Gronlund 1985, 418). The Likert-type scale was chosen because the questions on the survey were assessing the degree or frequency of tasks performed by the respondents. The Likert scale measures this type question and not those of a "yes" or "no" nature.

The Likert-type scale had 5 response choices as to how often a task is performed by the medical record director. The participant indicated how often they performed a task by circling a choice as follows:

AL -- Always (76-100% of the time)

FR -- Frequently (51-75% of the time)

SO -- Sometimes (26-50% of the time)

SE -- Seldom (1-25% of the time)

N -- Never

Each category was assigned an interval. "Always" was coded as 4, "Frequently" as 3, "Sometimes" as 2, "Seldom" as 1 and "Never" as 0. These numbers were used to determine the summative score of each of the 28 questions on the survey.

Treatment of the Data

Descriptive statistics were used to treat the demographic information. Frequency and percentages were reported for the following main categories: (a) education of participants and (b) number of beds for participating hospitals. Item scores were summated and then mean scores for R.R.A.s and A.R.T.s on each item were determined.

The hypothesis was analyzed using a t-test. The level of significance for this study was preset at equal to or less than .05. Cronbach Alpha was used to determine ex post facto reliability of the survey. Appropriate tables and graphs were developed.

CHAPTER 4

FINDINGS

Analysis was performed using descriptive statistics; frequencies and percentages. A multivariate t-test was performed between the Accredited Record Technician (A.R.T.) and Registered Record Administrator (R.R.A.) groups on each item. A t-test was also used between groups on the total mean.

Description of the Sample

Surveys were sent to 196 medical record directors in acute care hospitals with 50 - 200 beds. The completed surveys were received from 45 R.R.A.s and 42 A.R.T.s. Surveys were received from 14 respondents who had no medical record credentials. These were not considered in the final analysis. None were returned due to wrong address and none were sent back with no data. A second mailout was performed in which 8 surveys were received from the R.R.A.s and 5 from the A.R.T.s. The final size of the sample was 53 R.R.A.s and 47 A.R.T.s. The return of these surveys from the respondents yielded a 51% return rate.

Educational Background

The educational background of the A.R.T. participants was varied, while that of the R.R.A. was similar (see Table 1). Most of the R.R.A. participants (98%) graduated from a Baccalaureate program, whereas, 74.5% of the A.R.T.s participated in a correspondence

course and 25.5% graduated from a 2 year Medical Record Technician program. The R.R.A. programs do not offer correspondence courses. The correspondence courses would only be available to the A.R.T. graduates.

Table 1.--Type of Education by Frequency and Percentage

Education	Frequency	%
Correspondence Course (M.R.T. Program)		
A.R.T.	35	74.5
R.R.A.	0	0
Associate Degree (M.R.T. Program)		
A.R.T.	12	25.5
R.R.A.	0	0
Baccalaureate (M.R.A. Program)		
A.R.T.	0	0
R.R.A.	52	98.1
Post Baccalaureate M.R.A. Program		
A.R.T.	0	0
R.R.A.	1	1.9

Hospital Size

The size of the hospital in which the R.R.A.s and A.R.T.s were employed varied (see Table 2). The A.R.T. directors were employed more often in hospitals with less than 75 beds than were the R.R.A. directors. The hospitals with 75 - 149 beds had 24 A.R.T. directors and 28 R.R.A. directors, which was not a great difference. However, hospitals with 150 - 299 beds had 20 R.R.A. directors and only 7 A.R.T. directors.

Table 2.--Bed Size by Frequency and Percentage

Classification	Frequency	%
Less than 75 beds		
A.R.T.	16	34
R.R.A.	5	9.4
75 - 149 beds		
A.R.T.	24	51.1
R.R.A.	28	52.8
150 - 299 beds		
A.R.T.	7	14.9
R.R.A.	20	37.8

Item Analysis

Mean scores for R.R.A.s and A.R.T.s on each item revealed few differences in tasks performed by the two groups (see Table 3). Since the overall multivariate t-test was not significant, differences on individual questions 1 through 28 were not considered significant.

The Hotelling T^2 was calculated to provide the overall difference in the 28 variables. This test was performed because there were multiple variables to be tested. The univariate test was then performed on each variable individually to determine any differences in values.

The lowest mean score (1.03) was found for R.R.A.s on question 13. The mean score on question 13 for A.R.T.s was 2.38. Thus, fewer R.R.A.s transcribe health information than A.R.T.s. The lowest mean score for A.R.T.s was also on question 13.

Therefore, even though A.R.T. directors transcribe health information more often than R.R.A. directors, neither transcribe medical records very often.

The highest mean score (3.84) for R.R.A.s was on question 23. The mean score for A.R.T.s on question 24 was 3.95. This reveals that both R.R.A.s and A.R.T.s are responsible for goal-setting in their departments, but the A.R.T.s are responsible slightly more often than the R.R.A. directors.

The highest mean scores for A.R.T.s were on questions 23 and 24 (3.95 and 3.95, respectively). This question related to goal-setting in the medical record department. A.R.T.s appear to be responsible slightly more often than the R.R.A. directors (3.84 and 3.73, respectively).

The mean scores that were most similar for A.R.T.s and R.R.A.s was on question 27. The R.R.A. group's mean score was 3.74, with 3.73 for the A.R.T. group. This question related to participation in hospital-wide committees. Both groups participate actively in hospital-wide committees.

The t-test revealed that the group mean for the A.R.T.s was 99.34. The group mean for the R.R.A.s was 90.35, $t=4.29$. The low to high range of scores for the A.R.T. was 81 - 112 and 60 - 112 for the R.R.A. group. The Hotelling $T^2 = 62.3$, $F = 1.61$, $p = .055$. This means that overall, there was no significant difference in competencies performed by R.R.A.s and A.R.T.s.

The null hypothesis was, "there is no significant difference between frequency of competencies performed by Registered Record Administrators and Accredited Record Technicians in a director's position in 50 - 200 bed acute care hospitals in Texas, as measured by the Registered Record Administrator and Accredited Record Technician Competency Analysis Inventory." Level of significance was .055. Since the value had been preset at $\leq .05$, survey findings between the A.R.T. and R.R.A. groups were not

significant. Therefore, the hypothesis was accepted.

Table 3.--Multivariate Analysis of Tasks

Variable	Group	M	t	p
Question 1	1	3.89	2.10	.039
	2	3.64		
Question 2	1	3.78	2.04	.044
	2	3.52		
Question 3	1	3.72	1.05	.295
	2	3.58		
Question 4	1	3.63	2.83	.005
	2	3.22		
Question 5	1	3.80	1.56	.122
	2	3.60		
Question 6	1	3.78	1.30	.196
	2	3.62		
Question 7	1	2.93	2.99	.003
	2	2.18		
Question 8	1	3.87	1.66	.099
	2	3.64		
Question 9	1	3.93	1.97	.053
	2	3.77		
Question 10	1	3.93	2.74	.007
	2	3.64		

Table 3.--Continued

Variable	Group	M	t	p
Question 11	1	3.29	1.05	.296
	2	3.07		
Question 12	1	3.59	1.67	.099
	2	3.30		
Question 13	1	2.38	4.37	.000
	2	1.03		
Question 14	1	2.91	1.21	.228
	2	2.66		
Question 15	1	3.82	2.10	.038
	2	3.58		
Question 16	1	3.36	3.31	.001
	2	2.71		
Question 17	1	3.38	1.97	.051
	2	2.98		
Question 18	1	3.23	1.98	.050
	2	2.75		
Question 19	1	2.46	-1.17	.245
	2	2.79		
Question 20	1	2.87	-0.81	.422
	2	3.07		
Question 21	1	3.82	2.58	.012
	2	3.35		

Table 3.--Continued

Variable	Group	M	t	p
Question 22	1	3.51	4.48	.000
	2	2.41		
Question 23	1	3.95	1.23	.221
	2	3.84		
Question 24	1	3.95	2.44	.017
	2	3.73		
Question 25	1	3.93	1.59	.116
	2	3.77		
Question 26	1	3.89	2.37	.020
	2	3.62		
Question 27	1	3.74	0.08	.939
	2	3.73		
Question 28	1	3.85	3.26	.001
	2	3.43		

Note: Group 1 = ART; Group 2 = RRA

Hotelling T^2 = 62.3; F = 1.61; p = .055

Survey Reliability

Ex post facto reliability of the survey was determined by Cronbach Alpha. Cronbach Alpha = .85, therefore, the survey was found to be reliable.

CHAPTER 5

SUMMARY, CONCLUSIONS, DISCUSSION AND RECOMENDATIONS

Presented in this chapter is a summary of the study and discussion of the findings related to frequency of competencies performed by Accredited Record Technicians (A.R.T.) and Registered Record Administrators (R.R.A.). Conclusions based on the findings and recommendations for further study comprise the last part of this chapter.

Summary

The problem of this study was to determine the differences in competencies performed by medical record directors in acute care facilities who were R.R.A.s and A.R.T.s. The purpose of the study was to identify competencies for R.R.A.s and A.R.T.s who were medical record directors in 50 -200 bed acute care hospitals in Texas. Another purpose was to identify the frequency with which the competencies were performed by R.R.A.s and A.R.T.s as directors of medical record departments in acute care hospitals. The hypothesis was, "there is no significant difference between frequency of competencies performed by Registered Record Administrators and Accredited Record Technicians in a director's position in a 50 - 200 bed acute care hospital in Texas, as measured by the Registered Record Administrator and Accredited Record Technician Competency Analysis Inventory."

Data were collected via a Likert-type mailout survey entitled "R.R.A. and A.R.T. Competency Analysis Inventory." The first part contained questions related to selected

demographic variables and the second part was related to competencies performed by directors of medical record departments. Descriptive statistics were used to treat the demographic information. A t-test was used to analyze the hypothesis.

Conclusions

After analysis of the findings of this study, the following conclusion was drawn: The competencies performed by R.R.A.s and A.R.T.s in a medical record director's position in 50 - 200 bed acute care hospitals in Texas were similar.

Discussion of Findings

The results of the statistical analysis indicated that the p value = .055 . Therefore, any differences on the survey items were found to be insignificant. This would indicate that overall, similar tasks are performed by R.R.A. and A.R.T. directors of medical record departments.

Similarities were found between tasks performed by A.R.T. and R.R.A. directors. One reason may be that both were hired for the same position and very likely had similar job descriptions, no matter what their credentials.

In some instances, A.R.T.s may be hired in the director's position and paid less, even though they have the same job duties. The lower salaries are probably due to the difference in educational background and certainly not their job responsibilities.

Another reason that similar tasks were performed by R.R.A.s and A.R.T.s was that the Joint Commission on Accreditation of Healthcare Organizations and Medicare require that certain tasks be performed in the medical record department. It is interesting to note that 14 surveys were received from medical record directors without any credentials. They were performing tasks similar to the A.R.T.s and R.R.A.s. They, of course, had

R.R.A. or A.R.T. consultants as required by the Joint Commission on Accreditation of Healthcare Organizations and Medicare.

According to the survey results, A.R.T.s do not perform quality assurance functions as often as R.R.A.s. This has become a top priority with accrediting agencies in recent years. Therefore, curriculum for medical record programs may need to be updated.

The study was performed only in Texas hospitals. Texas may not be representative of the entire country. Therefore, generalizations cannot be made from one population to another.

The results of this study were consistent with the results of a South Carolina study (1985). The South Carolina study compared roles and responsibilities of A.R.T. and R.R.A. department directors. The South Carolina study was similar to this study in that A.R.T.s and R.R.A.s were mailed questionnaires to determine what their roles and responsibilities were as the director of medical record departments. Surveys were sent only to acute care hospitals, just as in this study. Few differences were found in the roles and responsiblities of the R.R.A.s and A.R.T.s in the South Carolina study.

The Innovations and Research Review Study (1987) was also reviewed. This study involved only entry-level R.R.A.s and A.R.T.s. The results indicated a significant difference between entry-level tasks performed by A.R.T.s and R.R.A.s. The main differences in tasks performed were, for the most part, managerial in nature. R.R.A. respondents were employed in a managerial capacity 73% of the time, as compared to 34% for the A.R.T. respondents (Johns and Blide 1990, 70). The fact that entry-level directors only were surveyed may have resulted in the differences.

The findings of the Council on Certification Roles and Functions Study (1991) revealed that A.R.T.s and R.R.A.s are performing some similar tasks. However, the R.R.A. tasks were more managerial in nature, whereas the A.R.T. tasks were more

technically oriented.

The study provided updated competencies for entry-level A.R.T.s and and R.R.A.s referred to as Domains of Practice, tasks and subtasks. A domain represents a major area of responsibility or duties involved in the profession. A domain is broken down into tasks. A task is a specific goal-directed statement that describes an identifiable task performed by a health information professional. A task specifies the work activity performed, the goal of the work activity, and how it is accomplished. A subtask is a statement that describes the specific work activities under a task (American Health Information Management Association 1992). New test specifications for the credentialing of A.R.T.s and R.R.A.s were also developed from the study.

The study had important implications for education in that curriculum may be changed for A.R.T. and R.R.A. programs. The domains and tasks may also be used as guidelines for the minimal level of knowledge and skills that medical record graduates must possess upon graduation.

Some participants who completed the A.R.T. and R.R.A. Competency Analysis Inventory indicated that they did not understand if the questions related only to their department or the entire hospital. This may have had an effect on the results of the survey. If the survey was replicated, it should indicate that all questions referred only to the medical record department or director.

The survey was not reviewed by any medical record directors prior to mailing it out. Therefore, content validity of the survey was not predetermined. Had the survey been reviewed more in depth, changes could have been made. This would have altered the survey which, in turn, could have altered the results of the study.

The study indicated that hospitals could hire either the A.R.T. or the R.R.A. director since they both perform the same tasks. However, the smaller the hospital,

the more likely they are to hire A.R.T. directors. It usually saves the hospital money if they employ those with less education. Since the study indicated that both A.R.T.s and R.R.As perform the same tasks, perhaps there is a need for one level of professional.

For medical record professionals, the search for delivering health information efficiently has become quite a challenge. There are many issues facing R.R.A.s and A.R.T.s today and in the future. Some of these are locating concise records rapidly, maximizing technology, the budgeting process, staffing, convincing administration of needs for the medical record department.

The results of this survey revealed similarities in tasks performed by A.R.T.s and R.R.A.s as directors of medical record departments. Since the A.R.T. educational preparation is not as extensive as the R.R.A.s, they may not be as prepared to perform the duties required of them upon graduation.

Recommendations for Further Research

The following recommendations for further research are made:

1. The study should be altered using a random sample of hospitals throughout the United States.

2. The study should be altered surveying first year directors only, or by a series of years.

3. The study should be altered surveying entry-level A.R.T.s and R.R.As and experienced AR.T.s and R.R.A.s.

4. The study should be altered surveying directors versus non-director supervisors in the medical record department.

5. The study should be altered using only R.R.A. competencies.

6. The study should be altered using larger hospitals.

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APPENDICES

APPENDIX A

COVER LETTER

Dear Medical Record Director:

In recent years, roles and responsibilities of Medical Record Directors have been expanded. Medical Record Personnel have become increasingly important in health facilities. I am surveying R.R.A. and A.R.T. Directors to determine demographic information and tasks performed by both groups.

Your work experience can provide valuable information for determining if there is a duplication of tasks by R.R.A. and A.R.T. Directors. By completing the enclosed questionnaire, you can share your work experiences. This information will be utilized for completing a Master of Science degree at Texas Woman's University.

You may be assured of complete confidentiality. No respondent will be identified by name. Only group data will be used. Completion and return of the questionnaire will indicate consent.

If you do not wish to participate in the survey, please return the unanswered questionnaire in the enclosed preaddressed, stamped envelope. You may receive a summary of the results by writing "copy of results requested" on the back of the return envelope and printing your name and address below it. Please do not put this information on the questionnaire itself.

I will be happy to answer any questions you might have. You may contact me at (903) 683-2016. Thank you for your assistance.

Sincerely,

Gail Sanders, R.R.A.

Enclosures

APPENDIX B

FOLLOW-UP COVER LETTER

Dear Medical Record Administrator,

Recently you received a letter requesting your participation in a study regarding tasks performed by R.R.A.s and A.R.T.s. As of today, I have not received your completed questionnaire.

This research will help determine if there is a duplication of tasks performed by R.R.A.s and A.R.T.s and if four year Medical Record Administration programs should expand to other areas if tasks are similar.

I am writing you again because of the significance each questionnaire has to the usefulness of this study.

In the event your questionnaire has been misplaced, a replacement is enclosed with a preaddressed, stamped envelope.

If you do not wish to participate in the survey, please return the unanswered questionnaire in the enclosed preaddressed, stamped envelope.

Your cooperation is greatly appreciated.

Sincerely,

Gail Sanders, R.R.A.

Enclosures

APPENDIX C

REGISTERED RECORD ADMINISTRATOR AND ACCREDITED RECORD TECHNICIAN COMPETENCY ANALYSIS INVENTORY

REGISTERED RECORD ADMINISTRATOR AND ACCREDITED RECORD TECHNICIAN DIRECTORS COMPETENCY ANALYSIS INVENTORY

Instructions

1. There are two parts to this questionnaire.
2. Please answer all items carefully in each section of this questionnaire by circling the appropriate answer or filling in the appropriate space.
3. Please do not enter your name on the questionnaire.

PART I: DEMOGRAPHIC INFORMATION

This part of the questionnaire is intended to provide information about your employing institution and background.

1. Are you the Director of the Medical Record Department in an acute care hospital? ___Yes___No. If yes, please answer the remainder of questionnaire. If no, please return the questionnaire in the enclosed envelope.
2. What certification do you have?
   A. A.R.T. only
   B. R.R.A. only
   C. A.R.T. and R.R.A.
   D. Not certified
3. What is you medical record educational background?
   A. M.R.T. program (correspondence course)
   B. Associate degree (M.R.T. program)
   C. Baccalaureate M.R.A. program
   D. Post -Baccalaureate M.R.A. program
4. How many beds in your facility?
   A. Less than 75 beds
   B. 75 - 149 beds
   C. 150 - 299 beds
   D. 300 beds or over

PART II: ROLE STATEMENTS

This part of the questionnaire is intended to identify the specific responsibilities performed by medical record department directors as health information managers.

DIRECTIONS: Please indicate how often you perform the following tasks as medical record director for your facility, by circling the appropriate letter(s). There is no right or wrong answer.

KEY

AL -- Always (76-100% of the time)
FR -- Frequently (51-75% of the time)
SO -- Sometimes (26-50% of the time)
SE -- Seldom (1-25% of the time)
N -- Never

KEY

AL--Always (76-100% of the time)
FR--Frequently (51-75% of the time)
SO--Sometimes (26-50% of the time)
SE--Seldom (1-25% of the time)
N--Never

AL FR SO SE N 1. Developing and evaluating policies and procedures is my responsibility.

AL FR SO SE N 2. Applying policies and procedures is my responsibility.

AL FR SO SE N 3. Recommending and communicating health information and standards to Administrative staff is my responsibility.

AL FR SO SE N 4. Retrieving information and preparing reports for administrative staff is my responsibility.

AL FR SO SE N 5. Preparing and evaluating policies and procedures to assure confidentiality of health information is my responsibility.

AL FR SO SE N 6. Following policies and procedures designed to assure confidentiality of health information is my responsibility.

AL FR SO SE N 7. Releasing health information to authorized persons, following written procedures, is my responsibility.

AL FR SO SE N 8. Directing activities related to release of information is my responsibility.

AL FR SO SE N 9. Evaluating and counseling employees regarding the performance of their responsibilities is my responsibility.

AL FR SO SE N 10. Applying personnel policies is my responsibility.

AL FR SO SE N 11. Organizing, developing and conducting inservice training activities is my responsibility.

AL FR SO SE N 12. Evaluating manual or automated systems for collecting and processing health information is my responsibility.

AL FR SO SE N 13. Transcribing health information is my responsibility.

AL FR SO SE N 14. Designing forms to meet organizational needs is my responsibility.

KEY

AL--Always (76-100% of the time)
FR--Frequently (51-75% of the time)
SO--Sometimes ((26-50% of the time)
SE--Seldom (1-25% of the time)
N--Never

AL FR SO SE N 15. Managing activities related to maintenance and retrieval of health information is my responsibility.

AL FR SO SE N 16. Retrieving health information from manual or automated systems is my responsibility.

AL FR SO SE N 17. Preparing statistical reports is my responsibility.

AL FR SO SE N 18. Following procedures for collecting and processing statistics is my responsibility.

AL FR SO SE N 19. Designing, implementing and evaluating quality assurance systems is my responsibility.

AL FR SO SE N 20. Following organizational policies and procedures for quality assurance is my responsibility.

AL FR SO SE N 21. Directing indexing and coding is my responsibility.

AL FR SO SE N 22. Following procedures for coding and indexing is my responsibility.

AL FR SO SE N 23. Goal-setting for the Medical Record Department is my responsibility.

AL FR SO SE N 24. Writing job descriptions is my responsibility.

AL FR SO SE N 25. Periodic performance evaluation of employees is my responsibility.

AL FR SO SE N 26. Evaluation of productivity of employees is my responsibility.

AL FR SO SE N 27. Participation in hospital-wide committees is my responsibility.

AL FR SO SE N 28. Establishing motivational techniques for employees is my responsibility.

APPENDIX D

DEVELOPMENT OF SURVEY QUESTIONS

Table 4.--Development of Survey Questions

Variable	Group	Competency Number(s)
Question 1	2	1.9
Question 2	1	1.1
Question 3	2	1.25
Question 4	1	5.13
Question 5	2	2.2
Question 6	1	2.3
Question 7	1	2.1
Question 8	2	2.4
Question 9	2	3.5
Question 10	1	3.3
Question 11	2	3.12
Question 12	2	4.7
Question 13	1	4.4
Question 14	2	1.20
Question 15	2	4.9
Question 16	1	8.3
Question 17	2	7.4
Question 18	1	7.1
Question 19	2	8.2
Question 20	1	8.1
Question 21	2	9.1
Question 22	1	9.1
Question 23	2	1.1
Question 24	1, 2	3.1, 3.2 (respectively)
Question 25	2	3.10
Question 26	1, 2	1.6, 1.17 (respectively)
Question 27	2	1.24
Question 28	1, 2	3.4, 3.14 (respectively)

Note: Group 1 = ART; Group 2 = RRA