REPORT OF THE

JOINT SUBCOMMITTEE TO STUDY THE PUBLIC HEALTH IMPLICATIONS OF LICENSING RADIOLOGIC TECHNOLOGY PRACTITIONERS

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

HOUSE DOCUMENT NO. 3

COMMONWEALTH OF VIRGINIA
RICHMOND
1996

MEMBERS OF THE JOINT SUBCOMMITTEE

DELEGATE WARD L. ARMSTRONG, CHAIRMAN
DELEGATE ALAN E. MAYER
DELEGATE JULIA A. CONNALLY
DELEGATE ERIC I. CANTOR
SENATOR RICHARD L. SASLAW
SENATOR L. LOUISE LUCAS
SENATOR RUSSELL POTTS, JR.

STAFF

Division of Legislative Services

Gayle Nowell Vergara, Research Associate
Carol S. Agee, Operations Staff Assistant

Office of the Clerk, House of Delegates

TABLE OF CONTENTS

Report of the
Joint Subcommittee to Study the Public Health Implications of Licensing Radiologic Technology Practitioners
to
The Governor
and the
General Assembly of Virginia
Richmond, Virginia
June, 1995

Joint Subcommittee Recommendation

At the conclusion of its study, the joint subcommittee endorsed legislation to require the licensure of radiologic technologists. The proposed legislation (i) provided for a two-tier licensure to allow full unlimited practice for those who met certain training and competency standards and a limited licensure for those who performed radiographic procedures only on certain areas of the body; (ii) allowed use of currently recognized testing organizations to minimize cost to the state and place Virginia in a better position for reciprocity and endorsement of licensure; (iii) exempted certain individuals who already must receive similar training under the auspices of another board under the Department of Health Professions; (iv) required continuing education; and (v) had a delayed effective date to allow for regulations to be adopted and for individuals to receive the necessary training.

Executive Summary

X-rays were discovered in 1895 and by mid-1896 the harmful effects of these rays on skin were beginning to be noted.[1] When the potentially beneficial uses of these rays were discovered for use in medical diagnosis and therapy, the usage of the machines expanded as did the number of persons operating such machinery. Initial study and documentation of the effects of the application of ionizing radiation since the beginning of its usage on humans and animals accrued slowly in the first half of this century, but a large amount of scientific evidence has been collected systematically only since

[1] Samuel Glasstone, *Sourcebook on Atomic Energy*, (New York: Van Nostrand Reinhold, New York, 1967, 734).

World War II. Scientific research in physics and radiation biology has determined that there exists no dose of radiation too small to cause biological damage to the body, including genetic mutations.

To protect its residents, the Commonwealth of Virginia has established stringent guidelines and criteria for occupational licensure of occupations. Previous studies have examined this issue and, while not wanting to leave citizens unprotected but at the same time not impose overly intrusive regulations upon a particular occupation, those studies recommended only registration--the first and easiest level of regulation. A later study, however, opted for certification, or title protection, for radiologic technologists. This study committee felt that both of those systems, while appropriate at those particular times, were insufficient for today's needs and that a higher level of regulation in the form of licensure was necessary to protect the quality of health care in the Commonwealth. The subcommittee also noted that under Virginia law, dental technicians, veterinary assistants, and even individuals who x-ray industrial pipe fittings had to exhibit minimum training and competency standards, while persons who x-ray humans did not.

After reviewing the standards set by the Department of Health Professions for the regulation of a health profession, the joint subcommittee endorsed legislation to require the licensure of radiologic technologists. In so doing, the joint subcommittee, being conscious of the impact which this legislation could have on the cost and provision of medical care, worked throughout the study with various interested groups, including the Virginia Society of Radiologic Technologists, the Medical Society, and the Academy of Family Practitioners. The legislation (i) provided for a two-tier licensure to allow full, unlimited practice to those who met certain training and competency standards and a limited licensure for those who performed radiographic procedures only on certain areas of the body; (ii) allowed use of currently recognized testing organizations to minimize cost to the state and place Virginia in a better position for reciprocity and endorsement of licensure; (iii) exempted certain individuals who already must receive similar training under the auspices of another board under the Department of Health Professions; (iv) required continuing education; and (v) had a delayed effective date to allow for regulations to be adopted and for individuals to receive the necessary training. The joint subcommittee also worked with many groups to assure that training was readily available in the Commonwealth and that programs could be developed to minimize the impact of this training on the provision of medical care, especially in the smaller, rural practices. (Copies of House Bill No. 1300, 1994, and the proposed regulations are found in Appendices 1 and 2.)

Authority for Study

Citing the crucial role played by radiologic technologists in the provision of quality health care and the inherent dangers involved when health professionals are not appropriately trained, the General Assembly passed House Joint Resolution No. 665 in 1993 to authorize further study of the issue of licensing radiologic technologists, an issue first examined by House Document 24 (1987). Radiologic technologists are currently certified pursuant to §§ 54.1-2956.6 and 54.1-2956.7, which permit only practitioners who have met certain examination requirements to call themselves certified radiologic technologists, but do not exclude an untrained person from operating x-ray machine. The joint subcommittee was charged with determining the level of training and expertise desirable for radiologic technology practitioners and the effect that licensure of such practitioners would have on health care costs and accessibility. To monitor the actions approved by the General Assembly in response to this study, House Joint Resolution No. 190 of 1994 and House Joint Resolution No. 617 of 1995 continued this study. (Copies are in Appendices 3 and 4.)

The joint subcommittee was chaired by Delegate Ward L. Armstrong of Martinsville. Other subcommittee members include Delegate Alan E. Mayer, Delegate Julia A. Connally, Delegate Eric I. Cantor, Senator Richard L. Saslaw, Senator L. Louise Lucas, and Senator Russell H. Potts, Jr. Continuing resolutions provided for the original membership of the subcommittee to continue and membership remained constant during the course of this study since no vacancies occurred.

Background

The Virginia Board of Health Professions was established by the General Assembly in 1977 to advise the Governor and the General Assembly on matters related to health occupational and professional regulation and to provide policy coordination for the 12 health professional regulatory boards administered by the Virginia Department of Health Professions.[2] The powers and duties of the Board, established in the Code of Virginia § 54.1-2510, include the following:

> [The Board shall] . . . evaluate all health care professions and occupations in the Commonwealth, including those regulated and those not regulated by other provisions of [Title 54.1] to consider whether each such profession or occupation should be

[2] *Policies and Procedures for the Evaluation of the Need to Regulate Health Occupations and Professions*, Virginia Department of Health Professions, 1992.

> regulated and the degree of regulation to be imposed. Whenever the Board determines that the public interest requires that a health care profession or occupation which is not regulated by law should be regulated, the Board shall recommend to the General Assembly a regulatory system to establish the appropriate degree of regulation. . .

Seventeen members appointed by the Governor comprise the Boardo: one member from each of the 12 health professional regulatory boards and five citizen members.

Prospective reviews of the need to regulate additional occupations and professions are commonly called "sunrise" reviews conducted by the Regulatory Research Committee. Each review evaluates proposals by professional organizations and culminates in a formal report. After board review, the proposals are evaluated by the Director, Governor and General Assembly. This process usually takes 12 to 18 months. Since the Board is advisory, the General Assembly makes the final determination through the adoption of legislation which specifies the occupation to be regulated, the degree of regulation, and the organizational structure to manage the program.

Occupational Regulatory Policies

The overarching philosophy of occupational and professional regulation in the Commonwealth is established in law -- the occupational property rights of the individual will be abridged only to the degree necessary to protect the public.

> The right of every person to engage in any lawful profession, trade or occupation of his choice is clearly protected by both the Constitution of the United States and the Constitution of the Commonwealth of Virginia. The Commonwealth cannot abridge such rights except as a reasonable exercise of its police powers when it is clearly found that such abridgment is necessary for the preservation of the health, safety and welfare of the public. (Code of Virginia, § 54.1-100.)

The General Assembly has further stipulated that regulation will be imposed upon an occupation or profession only when certain conditions are met (§ 54.1-100):

1. The unregulated practice of the profession or occupation can harm or endanger the health, safety or welfare of the public,

and the potential for harm is recognizable and not remote or dependent upon tenuous argument;
2. The practice of the profession or occupation has inherent qualities peculiar to it that distinguish it from ordinary work and labor;
3. The practice of the profession or occupation requires specialized skill or training and the public needs, and will benefit by, assurances of initial and continuing professional and occupational ability; and
4. The public is not effectively protected by other means.

Finally, the General Assembly has established that the following factors will be considered in evaluating the need for the regulation of health occupations and professions (§ 54.1-311) as well as for commercial ones:

- Whether the practitioner, if unregulated, performs a service for individuals involving a hazard to the public health, safety or welfare;
- Whether the opinion of a substantial portion of people who do not practice the particular profession or occupation feel there is a need for regulation;
- Whether there is sufficient demand for the service for which there is no regulated substitute and this service is required by a substantial portion of the population;
- Whether the profession or occupation requires high standards of public responsibility, character and performance of each individual engaged in the profession or occupation, evidenced by established and published codes of ethics;
- Whether the profession requires such skill that the public generally is not qualified to select a competent practitioner without some assurance that he has met minimum qualifications;
- Whether the professional or occupational associations do not adequately protect the public from incompetent, unscrupulous or irresponsible members of the profession or occupation;
- Whether current laws which pertain to public health, safety and welfare generally are ineffective or inadequate;
- Whether the characteristics of the profession or occupation make it impractical or impossible to prohibit those practices of the profession or occupation which are detrimental to the public health, safety and welfare;

- Whether the practitioner performs a service for others which may have a detrimental effect on third parties relying on the expert knowledge of the practitioner.

Levels of Occupational and Professional Regulation

Licensure is the most restrictive level of occupational regulation. Practice of these occupations is reserved to a select group based upon their possession of unique, identifiable, minimal competencies for safe practice. In Virginia, the practice of medicine and almost all other health professions requires licensure.

Certification grants title protection to persons meeting predetermined standards. Those without the title may perform the services of the occupation but may not use the title. In January 1992, however, the 11th U.S. Circuit Court of Appeals overturned a Florida law restricting the use of the term "psychologist" as an unconstitutional burden on commercial speech. The state is appealing the decision and attempting to accelerate existing plans to license psychologists.[3]

Registration is the least restrictive form of regulation, usually taking the form of requiring individuals to file their names, addresses and qualifications with a government agency before practicing the occupation.

In addition, § 54.1-311 establishes two other regulatory methods to ensure public protection: (i) private civil actions and criminal prosecutions, and (ii) inspections and injunctions. Strengthening consumer protection laws and regulations is a possible avenue for protecting the public that does not require the regulation of specific occupations or professions.

Criteria for Evaluating the Need for Regulation

The Board has developed seven criteria for determining the need for regulation, including whether (i) the unregulated practice of the occupation will endanger public health, safety, or welfare and the danger is recognizable, (ii) the practice requires specialized skills and assurance of initial and continuing competence, (iii) the practice requires independent judgment, (iv) the scope of practice is distinguishable from other licensed, regulated occupations, (v) the economic cost to the public justifies regulation, (vi) there are no alternatives to regulation which will adequately protect the

[3] Brinegar and Schmitt, "State Occupational and Professional Licensure," *The Book of States 1992-93*, The Council of State Governments.

public, and (vii) if regulation is justified, that the least restrictive alternative is recommended.

Licensing Rationale

Occupational and professional groups seek licensure for many reasons, including the most important, protecting the health and safety of the public. Other benefits include the opportunity for increased status, the potential for increased economic benefits, e.g., third-party reimbursements, and the protection against unqualified and unscrupulous practitioners. Arguments on the other side of the issue claim that licensure exists mainly to benefit the members of the profession and protection of the public is incidental. Other criticism cites increased costs to the public by limiting the number of practitioners, a shortage of practitioners in certain geographic areas, the underuse of auxiliary personnel, and restrictions on advertising and certain business structures.[4]

Examinations

Examinations are the method by which regulatory agencies test individuals in occupations and professions for competency. Generally, examinations must (i) be job related and based on well-designed and competently conducted job analyses; (ii) be based on a set of appropriate, consistently used test specifications; (iii) be well-written measures of the knowledge, skills and abilities required of someone entering the profession; (iv) have objectively determined cut scores that reflect the minimum level of competency necessary to protect the public; and (v) be securely, fairly and impartially administered. Computerization, a recent trend in testing, allows applicants to take the examination via computer and obtain results immediately. Although computerization saves time and promotes objectivity, states must still deal with the lack of standardized testing, inconsistencies in determining what constitutes an acceptable score, and reciprocity of licensure among the states.[5]

[4] Brinegar and Schmitt, pp. 567-568.
[5] Brinegar and Schmitt, pp. 570-571.

Other States

Of the 50 states and two territories listed in *The Book of States 1992-93* by the Council of State Governments, 27 license radiologic technologists:

Arizona	Montana
California	Nebraska
Delaware	New Jersey
Florida	New Mexico
Hawaii	New York
Illinois	Oregon
Indiana	Tennessee
Iowa	Texas
Kentucky	Vermont
Louisiana	Washington
Maine	West Virginia
Maryland	Wisconsin
Massachusetts	Wyoming
	Puerto Rico

Sunset Laws

Hawaii's Sunset Law, as a good example, reflects rising public antipathy "unwarranted" government interference in citizens' lives. The Sunset Law sets up a timetable terminating various occupational licensing programs. Unless reestablished, the programs disappear or "sunset" on a prescribed date. Generally, the criteria for regulation mirror those used by Virginia and other states and revolve around need for protection of the public, costs, and potential abuses. Licensing of radiological technicians was evaluated in Hawaii in 1989. The report recommended retaining the licensure of these technicians and suggested the following to improve the then-current system[6]:

- There is sufficient potential for public harm from the practice of radiology to warrant continued regulation of radiologic technologists. Certain changes in current statute were proposed, including; (a) to create the Board of Radiologic Technology as an advisory board; (b) to assign full authority for the licensing of radiologic technologists to the Department of Health; (c) to use the term "radiographer" for radiologic technologists who apply x-rays for diagnostic purposes; (d) to use the term "radiologic technologist" for both radiographers and radiation therapy technologists (these health professionals are known by a confusing variety of titles); (e)

[6] *Sunset Evaluation Report - Regulation of Radiologic Technologists*, A Report to the Governor and the Legislature of the State of Hawaii, Submitted by the State Auditor, Report No. 90-9, January, 1990.

to add the term "radiation therapy technology" for the practice of using x-rays, cobalt 60, or electrons for therapeutic purposes; (f) to provide for licensure by reciprocity for applicants licensed in states with standards comparable to those of Hawaii; and (g) to allow special temporary permits to be issued only for limited diagnostic x-ray purposes.

- The Department should take immediate steps to: (a) discontinue the use of special temporary permits to license radiation therapy technologists; (b) cease issuing temporary licenses; (c) replace the current licensing examination with the examinations of the American Registry of Radiologic Technologists (ARRT); and (d) determine which other states have equivalent licensing requirements that would qualify their license for reciprocity.
- The Department should expedite adoption of the proposed rules. However, it should amend its proposed rules to accomplish the following: (a) limit "grandfather" provisions to practitioners who are certified or eligible for certification by ARRT; (b) define shortage areas, delete provisions for special temporary permits for therapeutic purposes, and establish minimum standards relating to competency for applicants for special temporary permits [for limited diagnostic x-rays]; (c) establish quality assurance procedures for those working under special temporary permits; and (d) accept ARRT certification without any conditions in lieu of examination by the state and make the rules for accepting ARRT certification reciprocity.

Effects of Radiation

During the study a number of interested persons and entities made presentations to the Joint Subcommittee documenting the dangers of and the precautions needed for the application of ionizing radiation:

- Over 90 percent of all radiation that the general public receives is from medical x-ray examinations. Less than 10 percent of all radiation received is from nuclear power plants, nuclear fallout, and research accidents.
- A patient receives more radiation from an x-ray examination of the stomach than the exposed public of the Three Mile Island accident received.
- There was (in 1993) no law to protect the consumer/patient within the Commonwealth from unqualified operators of x-ray equipment. Although x-rays can expose a patient to deadly radiation, anyone could administer them.

- Studies have shown that the consumer/patient receives as much as 100 times more radiation from the same x-ray exam in one institution as in another because of unqualified operators of x-ray equipment.
- Excess low dose radiation from x-ray examinations can cause fetal mutations and cancer, and shorten the life span of an individual.
- Approximately 40 percent of the people administering ionizing radiation have not received any formal training in radiologic technology
- Licensure of radiologic technologists in other states has reduced hospital costs because the qualified technologist has fewer repeat films than does an unqualified person.[7]

Study and documentation of the effects of the application of ionizing radiation have noted potential damage to human tissue since the inception of the use of radiation devices on human and animal tissue, but in-depth research and collection of data began only after World War II in 1945. Biological damage resulting from exposure to radiation is well established and was reported in scientific journals as early as 1900. At that time, evidence was more anecdotal and was confined to individuals who were exposed through their occupations to unnatural amounts of radiation. Survivors of Nagasaki and Hiroshima and patients who have received courses of radiation therapy have provided valuable sources of information in the last half of this century.[8]

Following an exposure to radiation, a definite sequence of events follows: (i) a delay before any identifiable effect appears; (ii) manifest effects include observable responses which fall into either short-term or long-term categories and range from a period of hours or days following exposure to as much as months or years before they appear; and (iii) recovery or death. Short-term radiation effects are immediate and include reddening of the skin, burns equal to second-degree, loss of hair, changes in the blood system, fever, depressed gonadal function which could result in temporary or permanent sterility, and genetic damage. Long-term effects indicate that radiation is an agent of carcinogenesis, cataract formation, nonspecific life-span shortening, and both embryological and genetic damage. These long-term effects are most commonly seen as skin cancer, leukemia, bone sarcomas, and lung cancer. There is also a marked higher incidence of leukemia in children irradiated *in utero*. In short, " there does not appear to be a threshold dose of radiation below which genetic damage does not occur, and as a consequence, genetic mutations are believed to follow a nonthreshold, linear dose-

---

[7] Testimony by the Virginia Society of Radiologic Technologists, an affiliate of the American Society of Radiologic Technologists, to the Joint Subcommittee to Study the Public Health Implications of Licensing Radiologic Technologists, Summer, 1993.

[8] Scheele, Ronald V., and Jack Wakley, *Elements of Radiation Protection*, Charles Thomas Publishers, Springfield, Illinois, 1994.

responsive relationship. In addition, the effects of radiation-induced genetic damage seem to be additive. The degree of mutational damage caused by radiation also seems to be dose rate dependent, which means that for the same total dose, the mutational damage associated with a high dose rate will be greater than that due to a low dose rate. Estimates have been made that natural background radiation is responsible for from four to ten percent of all naturally occurring genetic mutations."[9]

Additional testimony to the joint subcommittee pointed to an ever-more compelling problem experienced when unqualified persons make x-ray films which are of inferior quality -- lack of diagnosis or misdiagnosis. When films are taken in small medical settings, the films are usually sent to a qualified radiologist for reading. Many times, the films must be returned because they cannot be interpreted. This deficiency results not only in the cost of an additional office visit by the patient, but additional exposure to radiation and sometimes a crucial delay in treatment. In other cases, the films are marginal and, for that reason, are not read properly by a radiologist, resulting in a lack of diagnosis or misdiagnosis and, therefore, improper treatment. Exacerbating these problems is patients' complete faith in x-ray accuracy, a false confidence that can lead to delayed treatment and deterioration in patients' health.

State and Federal Regulation

Because radiation-emitting machines were brought under adequate inspection routines by the Department of Health during the last decade, the quality of the machines themselves was not at issue. What was at issue, as brought out in testimony to the joint subcommittee, were the state regulations which required dental assistants, veterinary technicians, and even individuals who x-ray industrial pipe fittings to have minimal qualifications and certification to apply ionizing radiation, but individuals who perform similar procedures on the human body did not. Previous state studies, as described later in this document, have progressed from recommending registration only to recommending voluntary certification. Certification appears not to have been the answer since so few persons availed themselves of the program.

In 1954, the National Committee on Radiation Protection, now known as the National Council on Radiation Protection and Measurements (NCRP) set forth the standard that radiation exposures be kept "As Low As Reasonably Achievable," known as the ALARA concept. The Council declared that it was

[9] *Ibid.*, pp. 29-40.

incumbent upon radiologists and technologists to keep radiation levels below maximum allowable levels, thereby reducing the risk of harm to both patients and radiation workers. The Consumer-Patient Radiation Health and Safety Act of 1981 establishes minimum standards for the accreditation of education programs for persons who administer radiologic procedures and for the certification of such persons. Individual states have been encouraged to enact similar statutes and standards.[10] Additional federal legislation in recent years now requires that procedures which are reimbursed by Medicare/Medicaid, such as mammograms, must be performed by individuals who meet these standards.

Radiologic Practice in Hospitals

This scope of this study involved the application of ionizing radiation for the diagnosis and treatment of illness, injury and disease in man. During the investigation, most problems identified were those related to the use of radiation equipment in small practices and doctor's offices rather than in hospitals. Representatives from the Virginia Hospital Association testified that hospitals require a higher level of competence training, on par with that of the American Registry of Radiologic Technologists, than do small or individual practices. In fact, institutional certification to qualify for Medicare/Medicaid participation, as well as voluntary accreditation by the Joint Commission on Accreditation of Healthcare Organizations, necessitates the higher level of training. Also, professional liability carriers require such competence training in their risk management programs. Additionally, because of the higher skill levels of practitioners, repeat exposures have been kept to a minimum in the hospital setting.

[10] Mary Alice Statkiewicz, A.S., R.T.(R), L.R.T., and E. Russell Ritenour, Ph.D, *Radiation Protection of Student Radiographers*, Multi-Media Publishing, Inc., Denver, Colorado, pp. 52-53.

State Studies

The General Assembly of Virginia previously authorized two studies on this issue via House Joint Resolution No. 12 of 1986 and House Joint Resolution No. 82 of 1988. The executive summaries of both of those studies follow.

- Report of the Council on Health Regulatory Boards, Department of Health Regulatory Boards on *The Need for the Regulation of X-ray Technicians,* House Document No. 24, 1987 -

  The Virginia Council on Health Regulatory Boards (CHRB) has studied whether operators of x-ray equipment in health care settings should be regulated in the Commonwealth. This study expands and includes an on-going study of whether radiological technologists, a special class of x-ray equipment operators, should be regulated. In addition, the Council addressed other concerns of HJR 12 related to radiation safety: (1) whether there should be specific minimum education, examination, or continuing competency requirements for x-ray technicians who operate under the supervision of physicians, podiatrists, chiropractors, dentists, or veterinarians; (2) whether initiation of accreditation based on work experience is feasible; and (3) whether three distinct classes of x-ray technicians for dental, medical, and veterinary practice should be established and regulated.

  The Council study used six formal criteria adopted in 1983 for evaluating whether health professions should be regulated. The most important of these is the determination of whether a risk for harm to the public health, safety, and welfare is created by the unregulated practice of a health occupation.

  The study found that there is a risk for harm to the public from overexposure to ionizing radiation and from other problems resulting from faulty x-ray equipment, improper operating procedures and/or unqualified operators; however, existing Department of Health regulations governing ionizing radiation safety would provide public protection if fully enforced. While these regulations specifically address safety standards for x-ray equipment, procedures, and operators, enforcement has focused almost solely on equipment safety. Licensed practitioners and administrators who are required to register x-ray equipment with the Department of Health are not always aware of their

responsibility to ensure that operators under their supervision are "instructed in safe operating procedures and competent in the safe use of equipment" as required by Department of Health regulations.

The Council recommends that the least restrictive form of occupational regulation -- a registration program for x-ray equipment operators -- be established and operated by the Department of Health. This method of regulation provides public protection while avoiding the costly effects of more restrictive occupational regulatory schemes (certification or licensure.) Properly implemented, a registration program can provide public assurance that x-ray equipment operators are competent in the safe use of equipment, as they are now by regulation required to be.

Since radiation safety is equally a concern of the Department of Health and the Department of Health Regulatory Boards, the Council recommends that the Secretary of Human Resources appoint a special joint task force involving representatives from both departments to oversee implementation of the registration program and to study and recommend any appropriate standards that should apply to the registration program. This task force should also study other problems related to safe operation of x-ray equipment and recommend approaches to increased public safety for implementation by the Department of Health and the Department of Health Regulatory Boards. Finally, the Council recommends that the Secretary of Human Resources instruct this task force to prepare a report on its activities and accomplishments for the 1988 Session of the General Assembly.

The costs associated with the operation of the task force can be absorbed from existing revenues of the Department of Health and the Department of Health Regulatory Boards. The costs associated with implementing and operating a registration program for x-ray equipment operators should be offset by registration fees charged for obtaining permits for x-ray equipment operation. Since the Department of Health now maintains a structure for the inspection and permitting of x-ray equipment, the cost of integrating an operator registration program can be held to a minimum.

- Report of the Secretary of Human Resources on *The Study of the Needs of X-ray Technicians and Their Practice*, House Document No. 31, 1989.

  X-rays were discovered in 1895 and by mid-1896 the harmful effects of these rays on skin were beginning to be noted (Glasstone, 1967). Initially, the use of X-rays was restricted to trained scientists doing research on or with X-rays; however, as knowledge about the beneficial uses of these rays in medical diagnosis and therapy grew, the number of those operating X-ray machinery also grew. By 1986, there were 3,329 X-ray tubes being used by the medical professions in Virginia.

  The discussion of qualifications of X-ray machine operators has been ongoing in the Virginia Radiation Advisory Board meetings since, at least, 1979. House Joint Resolution 12 (1986), House Document 24 (1987), House Bill 91 (1987), and House Joint Resolution 82 (1988) all addressed the efficient and safe use of x-rays. The charge of the Task Force reported upon herein included investigating the safety of x-ray machinery; the competence of x-ray personnel; the implementation of any further regulation and the impact of such regulation.

  Difficulty was encountered because, at this time, each profession using x-ray technology has a different method for insuring safety and efficiency. The literature does not yet contain adequate data on such topics as methods of monitoring public safety relevant to x-ray use, harm to the public when x-ray personnel are not regulated, or cost to the consumer when x-ray personnel are regulated. Also, the relationship between safe and efficient use of x-ray machinery and the amount and type of training received was perceived as a key issue.

  In the Commonwealth of Virginia, the Board of Veterinary Medicine regulations specify extensive minimum requirements for facilities, equipment and safe operation of x-ray equipment with extensive educational and testing requirements, including clinical training. The Virginia Board of Dentistry regulations specify satisfactory completion of a Board-administered examination or satisfactory completion of a course and/or examination in radiation safety from an approved institution or organization. In contrast, the Virginia Board of Medicine has no regulations dealing specifically with the regulation of x-ray equipment operators. Licensed physicians are responsible for x-ray personnel under their supervision even though the x-rays taken in the private offices of medical doctors or chiropractors

may involve relatively large and/or vulnerable areas of the body and therefore persons taking x-rays in those settings are most in need of proper training to insure patient safety.

In discussions concerning the various types of regulation, the Task Force strongly favored certification over either registration or licensure. Certification is defined in the *Code of Virginia* as a form of regulation recognizing persons who have met certain educational and experience standards to engage in an occupation. Although one may practice the occupation without certification, only those who are certified may use the occupational title.

In addition, the Task Force recommends that 1) each discipline employing personnel to operate x-ray machinery complete a study of their own rules and regulations to determine adequacy in protecting the public from harm, no later than December 1989 for review by the 1990 General Assembly; 2) the Board of Medicine complete an evaluation and recommendations of methods for public protection to be practiced by licensed practitioners and by the allied health personnel under their supervision, no later than December 1989 for review by the 1990 General Assembly; and 3) the Council on Health Professions examine the methods by which safety is monitored, accumulate data on the harm to the public when no regulation takes place, and accumulate data on costs to the consumer when regulation takes place, no later than December 1989 for review by the 1990 General Assembly.

Rationale for Licensing Radiologic Technologists

After numerous meetings and exhaustive public testimony, the joint subcommittee recommended that radiologic technologists who practice their trade in the Commonwealth should be required to meet basic levels of education and training through the licensure process. Much testimony centered on the impact licensure would have on the small community medical practice and access to medical care. The joint subcommittee worked with the Medical Society of Virginia and the Academy of Family Practitioners, as well as a number of other interested organizations, to ensure that this process would not adversely impact the provision or cost of medical care. In fact, a survey of small practice doctors in the Commonwealth, as well as unsolicited letters from practitioners, indicated not only a willingness to help improve the quality of medical care provided in their offices but also revealed a general reluctance to using anyone other than trained, qualified individuals to provide radiation care.
After hearing all testimony, the joint subcommittee made its recommendations for addressing certain critical questions.

- Can the unregulated practice of the occupational group harm or endanger the public? The unregulated practice of radiologic technology can indeed harm or endanger the public. As attested by scientific research in physics and radiation biology, there is no dose too small to cause biological damage. The joint subcommittee felt that the argument that regulation was unnecessary because there had been no demonstrable need based on the lack of malpractice suits did not stand the test of scrutiny since radiation damage, in many cases, was long-term and so closely tied to other diseases that a direct causative line could not be drawn. The subcommittee also expressed concern that improper diagnoses and improper techniques might be linked, but this problem did not involve excess radiation according to current standards.
- Is there some method of determining competence other than licensure in order to protect the public? There are alternative methods of credentialing practitioners, but their voluntary nature is an inherent weakness. The Commonwealth of Virginia had previously recommended the two lesser forms of regulation, registration and certification, but the lack of utilization posed a problem to the subcommittee. For this reason, the joint subcommittee felt that licensure was a necessary move to effectively regulate radiation practitioners.
- Does the occupational group requesting licensure have an established method of ensuring the competence of its members? Although

radiologic technology practitioners did not have such a program in Virginia prior to the conclusion of this study, proper, accredited educational programs preparing radiologic technologists, along with the state licensure program, are the mechanisms for ensuring the competency of its practitioners. Although competence can never be completely assured in any profession, initial competence can be measured by a competency-based educational program. The national certification program is a performance based examination, with continuing education requirements, that has been demonstrated to be valid and reliable.

- Does the cost to the public, the requesting occupational group, and the employing institution justify the establishment of an occupational licensing system? Costs involve such factors as the establishment and maintenance of a licensing board or other control mechanism, development of an examination to assess initial competence, periodic review and updating of examinations, establishment of a record-keeping system, and verification of records. Since Virginia currently uses the Board of Health Professions in general, and the Board of Medicine specifically, to license certain health professionals, no additional entity would be necessary. The legislation specifically permits using a qualified national examination in lieu of developing an examination and a testing process in the Commonwealth, thereby saving additional dollars. Virginia law also specifically requires the self-sustainment of any licensure program by that profession through the various fees. Although some initial costs as well as continuing individual costs borne by the practitioner would be involved, the joint subcommittee felt that the cost would not be prohibitive and would create a system whereby the citizenry of the Commonwealth would receive better health care. The joint subcommittee was also assured that training for radiologic technologists was widely available across the state, with 17 training programs in various hospitals, community colleges, and other settings. Concern about disruption in the provision of care in small medical practices was allayed with the development of a program which could provide necessary training on weekends and at night. Implementation of these regulations was also delayed until July 1, 1997, to allow sufficient time for personnel to receive training.
- What economic impact will the proposed licensure have on the labor market? How will this licensure affect the cost and access to medical care? Of great concern was the inflation of the cost of employment and resultant costs of medical care. In California and New York, which have long required radiologic technologist to be licensed, no appreciable salary increases occurred after implementation of state licensure programs. As stated earlier, hospitals affirm that using trained individuals controls costs by reducing the number of repeat

films which must be taken and by shortening the time between accurate diagnosis and appropriate treatment. The ultimate matter of patient care must be kept in perspective with the costs and benefit arguments of such a program.

To keep the adverse impact on medical care and costs at a minimum, the Joint Subcommittee recommended that (i) the licensure be a two-tier system which recognizes a fully qualified radiologic technologist who provides all basic radiological services, and a radiologic technologist, limited, who performs radiologic procedures only on certain areas of the body; (ii) a currently recognized competency testing organization, such as the American Registry of Radiologic Technologists, be utilized; (iii) certain individuals who already receive training under the auspices of another board under the Department of Health Professions be exempted; and (iv) continuing education be required to maintain assurance of competency. In addition, the joint subcommittee endeavored to involve all interested and affected parties in the study process as well as in the development of the proposed regulations. By resolution, the joint subcommittee has continued to review the process and to make recommendations. (A copy of House Bill 1300, 1994 appears in Appendix 1; the draft of proposed regulations developed by the Board of Medicine appears in Appendix 2; and public hearings will ensue in 1995.)

APPENDIX 1: HOUSE BILL 1300, 1994

APPENDIX 2: PROPOSED REGULATIONS

COMMONWEALTH of VIRGINIA

Department of Health Professions
Board of Medicine

John Hasty
Director of the Department

Warren W. Koontz, Jr., M.D.
Executive Director of the Board

6606 West Broad Street
4th Floor
Richmond, Virginia 23230-1717
(804) 662-9908
FAX (804) 662-9943

November 1, 1994

Delegate Ward Armstrong
c/o Gayle Vergara
Legislative Services
910 Capital St. 2nd Fl.
General Assembly Building
Richmond, Virginia 23219

Dear Delegate Armstrong and Gayle Vergara:

Please find enclosed the Draft of proposed regulations for VR465-10-01: Regulations Governing the Practice of Radiologic Technologist Practitioners, pursuant to House Bill 1300 (1994). The Draft is a result of meetings from the Ad Hoc Committee on Radiologic Practitioners of the Board of Medicine (public hearing - October 6, 1994), the Legislative Committee of the Board of Medicine, and the full Board of Medicine.

The following organizations provided information for this Draft:

- o American College of Radiology-Virginia Chapter
- o Medical Society of Virginia
- o Virginia Academy of Family Physicians
- o Virginia Chiropractic Association
- o Virginia Orthopedic Association
- o Virginia Society of Internal Medicine
- o Virginia Society of Radiologic Technologists
- o Virginia Urological Society

CHAPTER 803

An Act to amend and reenact § 54.1-2900 of the Code of Virginia, to amend the Code of Virginia by adding sections numbered 54.1-2956.8:1 and 54.1-2956.8:2, and to repeal §§ 54.1-2956.6 and 54.1-2956.7 of the Code of Virginia, relating to licensure of radiologic technologists.

[H 1300]

Approved April 11, 1994

Be it enacted by the General Assembly of Virginia:

1. That § 54.1-2900 of the Code of Virginia is amended and reenacted and that the Code of Virginia is amended by adding sections numbered 54.1-2956.8:1 and 54.1-2956.8:2 as follows:

§ 54.1-2900. Definitions.

As used in this chapter, unless the context requires a different meaning:

"Acupuncturist" means individuals approved by the Board to practice acupuncture. This is limited to "licensed acupuncturist" which means an individual other than a doctor of medicine, osteopathy or podiatry, who has successfully completed the requirements for licensure established by the Board (approved titles are limited to: Licensed Acupuncturist, Lic.Ac., L.Ac.) and "physician acupuncturist" which means doctors of medicine, osteopathy and podiatry who have fulfilled the physician requirements for licensure to practice acupuncture established by the Board.

"Board" means the Board of Medicine.

"Certified optometrist" means an optometrist who is licensed under Chapter 32 of this title and who has successfully completed the requirements for certification established by the Board of Medicine. Such certification shall enable an optometrist to treat certain diseases, including abnormal conditions, of the human eye and its adnexa, as specified by the Board of Medicine, with certain therapeutic pharmaceutical agents specified by the Board. However, such certification shall not permit treatment through surgery or other invasive modalities.

"Clinical psychologist" means a psychologist who is competent in the diagnosis, prevention, treatment and amelioration of psychological problems, behavioral or emotional disorders or conditions or mental conditions, by the application of psychological principles, psychological methods, or psychological procedures, including but not limited to psychological assessment and evaluation and psychotherapy, which does not amount to the practice of medicine. This definition shall not be construed to limit or restrict any person licensed by a health regulatory board as defined in § 54.1-2500 from rendering services which he is licensed to provide.

"Healing arts" means the arts and sciences dealing with the prevention, diagnosis, treatment and cure or alleviation of human physical or mental ailments, conditions, diseases, pain or infirmities.

"Practice of acupuncture" means the stimulation of certain points on or near the surface of the body by the insertion of needles to prevent or modify the perception of pain or to normalize physiological functions, including pain control, for the treatment of certain ailments or conditions of the body and includes the techniques of electroacupuncture, cupping and moxabustion. The practice of acupuncture does not include the use of physical therapy, chiropractic, osteopathic manipulative techniques nor the use or prescribing of any drugs, medications, herbal preparations, nutritional supplements, serums or vaccines.

"Practice of chiropractic" means the adjustment of the twenty-four movable vertebrae of the spinal column, and assisting nature for the purpose of normalizing the transmission of nerve energy, but does not include the use of surgery, obstetrics, osteopathy or the administration or prescribing of any drugs, medicines, serums or vaccines.

"Practice of clinical psychology" means the offering by an individual of his services to the public as a clinical psychologist.

"Practice of medicine or osteopathic medicine" means the prevention, diagnosis and treatment of human physical or mental ailments, conditions, diseases, pain or infirmities by any means or method.

"Practice of physical therapy" means, upon medical referral and direction, the evaluation, testing, treatment, reeducation and rehabilitation by physical, mechanical or electronic measures and procedures of individuals who, because of trauma, disease or birth defect, present physical and emotional disorders, but does not include the use of Roentgen rays and radium for diagnostic or therapeutic purposes or the use of electricity for shock therapy and surgical purposes including cauterization.

"Practice of podiatry" means the medical, mechanical and surgical treatment of the ailments of the human foot and ankle, but does not include amputation proximal to the metatarsal-phalangeal joints. The Board of Medicine shall determine whether a specific type of treatment of the foot and ankle is within the scope of practice of podiatry.

"Practice of radiologic technology" means the application of x-rays to human beings for diagnostic or therapeutic purposes.

"Radiologic technologist" means an individual, other than a licensed doctor of medicine, osteopathy, podiatry, or chiropractic, or a dentist licensed pursuant to Chapter 27 of this title, who (i) performs, may be called upon to perform, or who is licensed to perform a comprehensive scope of diagnostic radiologic procedures employing equipment which emits ionizing radiation and (ii) is delegated or exercises responsibility for the operation of radiation-generating equipment, the shielding of patient and staff from unnecessary radiation, the appropriate exposure of radiographs or other procedures which contribute to any significant extent to the site or dosage of ionizing radiation to which a patient is exposed.

"Radiologic technologist, limited" means an individual, other than a licensed radiologic technologist, dental hygienist or who is otherwise authorized by the Board of Dentistry under Chapter 27 of this title and the regulations pursuant thereto, who performs diagnostic radiographic procedures employing equipment which emits ionizing radiation which is limited to specific areas of the human body.

§ 54.1-2956.8:1. Unlawful to practice radiologic technology without license; unlawful designation as a radiologic technologist or radiologic technologist, limited; Board to regulate radiologic technologists.

Except as set forth herein, it shall be unlawful for a person to practice or hold himself out as practicing as a radiologic technologist or radiologic technologist, limited, unless he holds a license as such issued by the Board.

In addition, it shall be unlawful for any person who is not licensed under this chapter whose licensure has been suspended or revoked, or whose licensure has lapsed and has not been renewed to use in conjunction with his name the words "licensed radiologic technologist" or "licensed radiologic technologist, limited" or to otherwise by letters, words, representations, or insignias assert or imply that he is licensed to practice radiologic technology.

The Board shall prescribe by regulation the qualifications governing the licensure of radiologic technologists and radiologic technologists, limited. The regulations may include requirements for approved education programs, experience, examinations, and periodic review for continued competency.

The provisions of this section shall not apply to any employee of a hospital licensed pursuant to Article 1 (§ 32.1-123 et seq.) of Chapter 5 of Title 32.1 acting within the scope of his employment or engagement as a radiologic technologist.

§ 54.1-2956.8:2. Requisite training and educational achievements of radiologic technologists and radiologic technologists, limited.

The Board shall establish a testing program to determine the training and educational achievements of radiologic technologists or radiologic technologists, limited, or the Board may accept other evidence such as successful completion of a national certification examination, experience, or completion of an approved training program in lieu of testing and shall establish this as a prerequisite for approval of the licensee's application.

2. That §§ 54.1-2956.6 and 54.1-2956.7 of the Code of Virginia are repealed.

3. That the provisions of this act shall become effective on January 1, 1997.

4. That by December 1, 1994, the Board of Medicine shall develop proposed regulations for the licensure of radiologic technologists and radiologic technologists, limited in conformance with the provisions of this act. In so doing, the Board shall involve professional groups, such as the American College of Radiologists, the Academy of Family Physicians, the Virginia Society of Radiologic Technologists, and the Virginia Nurses Association.

5. That the Board of Medicine shall, prior to submission for public comment pursuant to the Administrative Process Act, share the proposed licensure requirements and recommendations with the Joint Subcommittee Studying the Public Health Implications of the Licensing of Radiologic Technologists for comment.

DRAFT TO GENERAL ASSEMBLY

DRAFT

DRAFT

VR465-10-01
Regulations Governing the Practice of
Radiologic Technologist Practitioners

TITLE OF REGULATIONS: VR465-10-01 - Regulations Governing the Practice of Radiologic Technologist Practitioners

STATUTORY AUTHORITY: Title 9, Chapters 2400 and 2900, Sections 54.1-2956.8:1. and 54.1-2958:2. of the Code of Virginia

EFFECTIVE DATE: January 1, 1997

SUMMARY: The Board of Medicine has repealed VR465-10-01 and replaced the regulations effective January 1, 1997. These regulations protect the health, safety, and welfare of the citizens of the Commonwealth by establishing requirements and fees for licensure of Radiologic Technologists and Radiologic Technologists - Limited, renewal of license, reinstatement of a lapsed license, and traineeship requirements for foreign graduates who have attended schools not approved by an accrediting agency recognized by the Board.

PART I
General Provisions

§ 1.1. Definitions

A. The following words and terms, when used in these regulations, shall have the following meanings, unless the context clearly indicates otherwise:

"ARRT" means the American Registry of Radiologic Technologists.

"Board" means the Virginia Board of Medicine.

"CLEP" means the College Level Examination Program.

"Direct supervision" means a radiologic technologist or doctor of medicine, osteopathy, chiropractic or podiatry is present and is fully responsible for the activities performed by the radiologic personnel.

"Examination" means an examination approved and prescribed by the Board for licensure as a radiologic technologist or radiologic technologist - limited.

"General supervision" means a radiologic technologist shall be available for consultation.

"JCAHO" means the Joint Commission on Accreditation of Healthcare Organizations.

"Radiologic Technologist" means an individual, other than a licensed doctor of medicine, osteopathy, podiatry, chiropractic, or dentist, who (i) performs, may be called upon to perform, or who is licensed to perform a comprehensive scope of diagnostic radiologic procedures employing equipment which emits ionizing radiation and (ii) is delegated or exercises responsibility for the operation of radiation-generating equipment, the shielding of patient and staff from unnecessary radiation, the appropriate exposure of radiographs or other procedures which contribute to any significant extent to the site or dosage or ionizing radiation to which a patient is exposed.

"Radiologic Technologist - Limited" means an individual, other than a licensed radiologic technologist, or persons licensed pursuant to § 54.1-2722 or who is otherwise authorized by the Board of Dentistry, who performs diagnostic radiographic procedures employing equipment which emits ionizing radiation which is limited to specific areas of the human body.

If you have any questions about the Draft, please call at (804) 662-9908. Thank you.

Sincerely,

Warren W. Koontz, M.D.

WWK/rp

Enclosure: Draft - VR465-10-01: Radiologic Technologists

cc: Thomas Wash, M.D.
John Hasty
Robert Nebiker
Eugenia Dorson
Russell Porter, Ph.D.
American College of Radiology-Virginia Chapter
Medical Society of Virginia
Virginia Academy of Family Physicians
Virginia Chiropractic Association
Virginia Orthopedic Association
Virginia Society of Internal Medicine
Virginia Society of Radiologic Technologists
Virginia Urological Society

Joint Subcommittee Studying the Public Health Implications of the Licensing of Radiologic Technologists

November 22, 1994

Chronological Order of *Final Draft for Regulations Governing the Practice of Radiologic Technologist Practitioners* - Pursuant to H.B. 1300 - 1994:

o **February 12, 1994:** H.B. 1300 - 1994 - mandated that the Board of Medicine draft regulations on licensing radiologic technologists by December 1, 1994.

o **March - June 1994:** Board of Medicine staff researched and drafted regulations for review by full Board of Medicine on June 9, 1994.

o **June 9, 1994:** Full Board of Medicine reviewed initial draft and sent initial draft to Legislative Committee for further review -and established Ad Hoc Committee to hear public comment on draft.

o **September 9, 1994:** Legislative Committee reviewed initial draft and made recommendations for Board staff to revise pursuant to Ad Hoc Committee meeting comments to be held on October 6, 1994.

o **October 6, 1994:** Ad Hoc Committee on hearing comments for Drafting Regulations pursuant to H.B. 1300 (Public Hearing) - the following were represented:

American College of Radiology - Virginia Chapter
Medical Society of Virginia
Virginia Academy of Family Physicians
Virginia Chiropractic Association
Virginia Orthopedic Association
Virginia Society of Internal Medicine
Virginia Society of Radiologic Technologists
Virginia Urological Society

o **October 13, 1994:** Full Board of Medicine reviewed public hearing comments - made recommendation to send revised draft to Legislative Committee for further review and staff to make revisions - and for Legislative Committee to send to Joint Subcommittee Studying the Public Health Implications of the Licensing of Radiologic Technologists by December 1, 1994.

o **October 28, 1994:** Legislative Committee reviewed revised draft and public comments - heard additional comments and instructed staff to make changes for Final Draft.

o **November 1, 1994:** Final Draft sent to Delegate Armstrong and Gayle Vergara c/o Legislative Services.

"Radiologic Technologist aide" means any non-licensed personnel performing pre or post-radiologic functions at the direction of a radiologic technologist or radiologic technologist - limited within the scope of these regulations.

"Direction" means the delegation of radiologic functions to be performed upon a patient from a licensed doctor of medicine, osteopathy, chiropractic, podiatry, or dentistry to a radiologic technologist, or radiologic technologist - limited for a specific purpose and confined to a specific anatomical area, that will be performed under the direction of and in continuing communication with the delegating practitioner.

"TOEFL" means the Test of English as a Foreign Language.

"Trainee" means a person undergoing a traineeship.

1. "Foreign educated trainee" means a radiologic technologist or radiologic technologist - limited who graduated from a school not approved by an accrediting agency recognized by the Board, and who is seeking licensure to practice in Virginia.

2. "Inactive practice trainee" means a radiologic technologist or radiologic technologist - limited who has been licensed in another state, has been inactive for two years or more, and who wishes to return to practice.

3. "Relicensure trainee" means a radiologic technologist or radiologic technologist - limited previously licensed in the Commonwealth who has been inactive for two years or more and who wishes to return to practice.

4. "Unlicensed graduate trainee" means a graduate of an approved radiologic technologist or radiologic technologist - limited program who has not taken the state licensure examination or who has taken the examination but not yet received a license from the Board, or who has failed the examination three times.

"Traineeship" means a period of activity during which an unlicensed radiologic technologist or radiologic technologist - limited, who is seeking licensure, works under the direct supervision of a radiologic technologist approved by the Board.

§ 1.2. Public Participation Guidelines

A separate Board document, VR465-01-01, Public Participation Guidelines, which provides for involvement of the public in the development of all regulations of the Virginia Board of Medicine, is incorporated by reference in these regulations.

PART II
Licensure: General Requirements

§ 2.1. General Requirements

A. No person shall practice as a radiologic technologist or radiologic technologist - limited, in the Commonwealth of Virginia except as provided in these regulations and the exemptions specified in § 54.1-2956.8:1.

B. Licensure by the Board to practice as a radiologic technologist or radiologic technologist - limited, shall be by examination or endorsement.

C. No more than 12 CLEP semester hours or credits, or similar type hours or credits, in general education, shall be accepted for licensure. No CLEP hours or credits shall be accepted for professional hours.

§ 2.2. Educational Requirements: Graduates of Approved Programs

A. An applicant for licensure as a radiologic technologist shall be a graduate of an ARRT accredited program or a program accredited by an agency recognized by the Board. The applicant shall submit to the Board documented evidence of his graduation from such a program.

B. An applicant for licensure as a radiologic technologist - limited, shall be an individual with training from an ARRT accredited program or a program recognized by the Board with the following coursework successfully completed:

1. General Education Requirements. A minimum of 3 semester hours in each of the following - anatomy and physiology.

2. Professional Education Requirements. A minimum of 3 semester hours for each area of radiologic imaging for which the applicant is applying.

§ 2.3. Educational Requirements: Graduates of schools not approved by an accrediting agency recognized by the Board.

A. An applicant for licensure as a radiologic technologist or radiologic technologist - limited, who graduated from a school not approved by an accrediting agency recognized by the Board, shall be a graduate of a school which provides instruction that meets or exceeds the following requirements.

B. An applicant for licensure as a radiologic technologist or radiologic technologist - limited, when filing his application and fee with the Board, shall also:

1. Submit proof of proficiency in the English language by passing with a grade of not lees than 560 on the TOEFL, or an equivalent examination approved by the Board. TOEFL may be waived upon evidence of English proficiency.

2. Submit a photostatic copy of the original certificate or diploma verifying his graduation from a radiologic technology curriculum, or successful completion of coursework completed for radiologic technologist - limited, which has been certified as a true copy of the original by a notary public.

3. If the certificate or diploma, or transcript, is not in the English language, submit either:

   a. An English translation of such certificate, diploma, or transcript by a qualified translator other than the applicant; or

   b. An official certification in English from the school attesting to the applicant's attendance, and graduation date or dates of successful completion of coursework.

4. Submit verification of the equivalency of the applicant's education to the following standards from a scholastic credentials service approved by the Board.

   a. The minimum educational requirements in general and professional education for licensure as a radiologic technologist shall be 120 semester hours as follows:

      1. General Education Requirements. A minimum of 40 semester hours is required with credits in each of the following - humanities, social sciences, natural sciences, physical sciences, and electives.

2. Professional Education Requirements. A minimum of 60 semester hours is required with credits in each of the following - basic health sciences, clinical sciences, and clinical education.

b. The minimum requirements in general and professional education for licensure as a radiologic technologist - limited, shall be as follows:

1. General Education Requirements. A minimum of 3 semester hours in each of the following - anatomy and physiology.

2. Professional Education Requirements. A minimum of 3 semester hours for each area of radiologic imaging for which the applicant is applying.

5. An applicant for licensure as a radiologic technologist shall submit verification of having successfully completed a fulltime 960 hour traineeship under the direct supervision of a radiologic technologist. The initial 480 hours must be in a hospital in Virginia that provides acute inpatient and outpatient care, is JCAHO approved, serves as a clinical education facility for students enrolled in an accredited program educating radiologic technologists, and is approved by the Board. The remaining 480 hours may be served in the same facility, or in a facility approved by the Board. If the remaining 480 hours is served in a facility other then a hospital as defined by § 32.1-123, the trainee shall be under the supervision of a radiologic technologist licensed under 54.1-2956.8:1.

6. An applicant for licensure as a radiologic technologist - limited, shall submit verification of having successfully completed a full time 460 hours traineeship under the direct supervision of a radiologic technologist. The 480 hours must be in a hospital in Virginia that provides acute inpatient and outpatient care, is JCAHO approved, serves as a clinical education facility for students enrolled in an accredited program educating radiologic technologists, and is approved by the Board.

7. It shall be the responsibility of the trainee to make the necessary arrangements for his training with the Director of Radiologic Technology, or the

Director's designee at the facility selected by the trainee.

8. The radiologic technologist supervising the radiologic technologist or radiologic technologist - limited, shall submit a progress report to the Deputy Executive Director at the end of each successive 480 hours. These reports shall be submitted on forms supplied by the Board.

   a. If the traineeship is not successfully completed at the end of 480 hours as determined by the supervising radiologic technologist, the Chairman of the Radiologic Advisory Committee or his designee shall determine if a new traineeship shall commence. If the Chairman of the Radiologic Advisory Committee determines that a new traineeship shall not commence, then the application for licensure shall be denied.

   b. If the initial traineeship is successfully completed after 480 hours, but is not successfully completed at the end of 960 hours as determined by the supervising radiologic technologist, the Chairman of the Radiologic Advisory Committee or his designee shall determine if a new traineeship shall commence. If the Chairman of the Radiologic Advisory Committee determines that a new traineeship shall not commence, then the application for licensure shall be denied.

   c. If the traineeship is not successfully completed at the end of 480 hours or 960 hours, and the Chairman of the Radiologic Advisory Committee determines the applicant may commence with a new 960 hour traineeship, then the traineeship shall be served in compliance with § 2.3.

   d. A progress report shall be provided at the end of the 480 hours of the second traineeship. If the second traineeship is not successfully completed at the end of 480 or 960 hours, then the application for licensure shall be denied.

9. The radiologic technologist supervising the radiologic therapist - limited trainee shall submit a final report to the Deputy Executive Director at the end of the traineeship. If the traineeship is not successfully completed at the end of 480 hours, as determined by the supervising radiologic technologist, the Chairman of the Radiologic

Advisory Committee or his designee, shall determine if a second 480 hour traineeship shall commence. If the Chairman of the Radiologic Advisory Committee determines that a second traineeship shall not commence, or after unsuccessful completion of a second 480 hours traineeship, then the application for licensure shall be denied.

10. The traineeship requirements of this part may be waived if the applicant for a radiologic technologist license can verify, in writing, the successful completion of one year of full time clinical radiologic technologist practice as a licensed radiologic technologist in the United States, its territories, or the District of Columbia, equivalent to the requirements of these regulations as a licensed radiologic technologist.

11. The traineeship requirements of this part may be waived if the applicant for a radiologic technologist - limited license can verify, in writing, the successful completion of one year full time clinical radiologic technologist - limited practice as a licensed radiologic technologist - limited in the United States, its territories, or the district of Columbia, equivalent to the requirements of these regulations as a licensed radiologic technologist - limited.

PART III
Licensure by Examination

§ 3.1. Prerequisites to Licensure

A. Every applicant for Board licensure by examination shall:

1. Meet the educational requirements specified in § 2.1 and § 2.2., or § 2.1 and § 2.3 of these regulations.

2. Submit the required application and credentials to the Board no less than 35 days prior to the date of examination or traineeship.

3. Submit, along with his application, the examination fee prescribed in § 9.1.

B. A radiologic technologist seeking licensure who graduated from a school approved by an accrediting agency recognized by the Board and who has been inactive for a period of two years or more pursuant to § 8.2. shall first successfully complete a fulltime traineeship of 320

hours for each biennium of inactivity, not to exceed 960 hours.

C. The first 320 hours of an inactivity traineeship shall be successfully completed in a hospital as defined in § 32.1-123 and approved by the Board that provides care to both inpatients and outpatients, is JCAHO approved, and is under the direct supervision of a radiologic technologist. The remaining hours of an inactivity traineeship shall be successfully competed in the same facility or in a facility approved by the Board.

D. The radiologic technologist supervising the radiologic technologist trainee shall submit a progress report to the Deputy Executive Director at the end of each successive 320 hours. These reports will be submitted on forms supplied by the Board.

1. If the traineeship is not successfully completed at the end of a 320 hour segment, as determined by the supervising radiologic technologist, the Chairman of the Radiologic Advisory Committee or his designee shall determine if a new traineeship shall commence. If the Chairman of the Radiologic Advisory Committee determines that a new traineeship shall not commence, then the application for licensure shall be denied.

2. If the traineeship is not successfully completed at the end of a 320 hour segment, and the Chairman of the Radiologic Advisory Committee determines that the applicant may commence with a new traineeship, then the traineeship shall be served in compliance with § 3.1. A progress report shall be provided at the end of each successive 320 hours. If the second traineeship is not successfully competed at the end of a 320 hour segment, then the application for licensure shall be denied.

§ 3.2. Conditions of Examinations

A. The licensure examinations for both the radiologic technologists and radiologic technologist - limited, shall be prepared and graded as prescribed and approved by the Board.

B. The Advisory Committee shall schedule and conduct the examinations at least once each fiscal year, the time and place to be determined by the Advisory Committee.

§ 3.3. Examination Scores

A. The minimum passing scores shall be established by the Radiologic Advisory Committee.

B. The scores shall be filed with the appropriate reporting service.

§ 3.4. Failure to Pass Examination

A. An applicant who fails the examination after three attempts shall be required to satisfactorily complete a 640 hour full time traineeship approved by the Chairman of the Radiologic Advisory Committee or his designee, prior to being eligible for three additional consecutive attempts. The traineeship shall be in a facility approved by the Board.

B. The radiologic technologist supervising the trainee shall submit a progress report to the Deputy Executive Director at the end of each successive 320 hours. These reports will be submitted on forms supplied by the Advisory Board. If the traineeship is not successfully completed at the end of a 320 hour segment, the application for licensure shall be denied.

C. An applicant who fails the examination after six attempts shall be denied licensure.

PART IV
Licensure by Endorsement

§ 4.1. Prerequisites to Licensure

A. Every applicant for initial Board licensure by endorsement shall:

1. Meet the educational requirements prescribed in § 2.1 and § 2.2, or § 2.1. and § 2.3 of these regulations;

2. Submit the required application and credentials to the Board not less than 35 days prior to the date of endorsement or traineeship; and

3. Submit if required, along with his application, the examination fee prescribed in § 9.1.

§ 4.2. Endorsement

B. A radiologic technologist or radiologic technologist - limited who has been licensed in the United States, its territories, or the District of Columbia, by examination equivalent to the Virginia examination at the time of licensure and who has met all other requirements of the Board may, upon recommendation of the Advisory Committee to the Board, be licensed in Virginia by endorsement.

C. Any radiologic technologist or radiologic technologist - limited seeking licensure by endorsement who has been inactive for a period of two years or more pursuant to § 8.2. who wishes to resume practice shall first successfully complete a traineeship and other requirements specified below:

1. For any radiologic technologist or radiologic technologist - limited who has had an inactive practice for a period of two to six years, a fulltime traineeship of 320 hours for each biennium of inactivity.

2. For any radiologic technologist or radiologic technologist - limited who has had an inactive practice for a period of six or more years, a fulltime traineeship of 960 hours, and successfully passing the respective current licensure examination approved by the Board.

D. The first 320 hours of an inactivity traineeship shall be successfully completed in a hospital as defined in § 32.1-123 and approved by the Board that provides care to both inpatients and outpatients, is JCAHO approved, and is under the direct supervision of a radiologic technologist. The remaining hours of an inactivity traineeship shall be successfully completed in a facility approved by the Board.

1. The radiologic technologist supervising the radiologic technologist, or radiologic technologist - limited trainee shall submit a progress report to the Deputy Executive Director at the end of each successive 320 hours. These reports will be submitted on forms supplied by the Advisory Board.

a. If the traineeship is not successfully completed at the end of a 320 hour segment, as determined by the supervising radiologic technologist, the Chairman of the Radiologic Advisory Committee or his designee shall determine if a new traineeship shall commence. If the Chairman of the Radiologic Advisory Committee determines that a new traineeship shall not commence, the application for licensure shall be denied.

b. If the traineeship is not successfully completed at the end of a 320 hour segment, and the Chairman of the Radiologic Advisory Committee determines that the applicant may commence with a new traineeship, then the traineeship shall be served in compliance with

§ 4.1. A progress report shall be provided at the end of each successive 320 hours. If the second traineeship is not successfully completed at the end of a 320 hour segment, the application for licensure shall be denied.

§ 4.3. Failure to Pass Examination

A. An applicant who fails the examination after three attempts shall be required to satisfactorily complete a 640 hour full time traineeship approved by the Chairman of the Radiologic Advisory Committee or his designee, prior to being eligible for three additional consecutive attempts. The traineeship shall be in a facility approved by the Advisory Board.

B. The radiologic technologist supervising the trainee shall submit a progress report to the Deputy Executive Director at the end of each successive 320 hours. These reports will be submitted on forms supplied by the Board. If the traineeship is not successfully completed at the end of a 320 hour segment, then the application for licensure shall be denied.

C. An applicant who fails the examination after six attempts shall be denied licensure.

PART V
Unlicensed Graduate Trainee

§ 5.1. Traineeship required for unlicensed graduate scheduled to sit for the Board's licensure examination.

A. Upon approval of the Chairman of the Radiologic Advisory Committee or his designee, an unlicensed graduate trainee may be employed under the direct supervision of a licensed radiologic technologist or doctor of medicine, osteopathy, chiropractic, podiatry, or dentistry, until the results of the next licensure examination.

B. The traineeship shall terminate upon receipt by the candidate of the licensure examination results.

C. The traineeship shall be in a facility or clinic approved by the Board.

PART VI
Practice of Radiologic Technologists

§ 6.1. General Requirements

All services rendered by a radiologic technologist shall be

performed only upon direction of a licensed doctor of medicine, osteopathy, chiropractic, podiatry, or dentistry.

§ 6.2. Individual responsibilities to patients and to licensed doctor of medicine, osteopathy, chiropractic, podiatry, or dentistry.

A. The radiologic technologist's responsibilities are to evaluate a patient for radiologic treatments, and administer and document such treatments within the limit of his professional knowledge, judgment and skills.

B. A radiologic technologist shall maintain continuing communication with the referring practitioner by reporting the results of radiologic treatments.

§ 6.3. Supervisory Responsibilities

A. A radiologic technologist shall supervise no more than four radiologic technologist - limited individuals.

B. A radiologic technologist shall be responsible for any action of persons performing radiologic functions under the radiologic technologist's supervision or direction.

C. A radiologic technologist may not delegate radiologic treatments to radiologic technologist aides except those activities that are available without prescription in the public domain to include but not limited to preparing the patient for radiologic treatments by placing lead shields on patients and post radiologic treatment.

Supervision of a radiologic technologist aide means that a licensed radiologic technologist, or radiologic technologist - limited within that practitioners scope of practice, must provide direct supervision to give direction and instruction when procedures or activities are performed. Such non-licensed personnel shall not perform those patient care functions that require professional judgment or discretion.

E. A radiologic technologist shall supervise no more than three individual trainees at any one time.

PART VII
Practice of Radiologic Technologist - Limited

§ 7.1. General Requirements

A radiologic technologist - limited, is permitted to perform radiologic functions within his capabilities and training, and to perform radiologic treatments within the anatomical limits of his specific limited licenses. The radiologic technologist

- limited is responsible to a radiologic technologist or a licensed doctor of medicine, osteopathy, chiropractic, podiatry, or dentistry.

§ 7.2. Individual responsibilities to patients and licensed radiologic technologist, doctor of medicine, osteopathy, chiropractic, podiatry, or dentistry.

A. The initial patient visit/intervention shall be made by a radiologic technologist or a licensed doctor of medicine, osteopathy, chiropractic, podiatry, or dentistry.

B. The radiologic technologist - limited's first visit/intervention with the patient shall only be made after verbal and/or written communication with the radiologic technologist or licensed doctor of medicine, osteopathy, chiropractic, podiatry, or dentistry. Documentation of the communication shall be made in the patient's record.

C. The radiologic technologist - limited's visits/interventions shall be made under direct supervision.

DRAFT

PART VIII
Renewal of Licensure: Update for Qualifications

§ 8.1. Biennial Renewal of License

A. Every radiologic technologist and radiologic technologist - limited who intends to continue practice shall renew his license biennially during his birth month in each odd numbered year and pay to the Board the renewal fee prescribed in § 9.1 of these regulations.

DRAFT

B. A licensee whose license has not been renewed by the first day of the month following the month in which renewal is required shall be dropped from the registration roll.

C. An additional fee to cover administrative costs for processing a late application shall be imposed by the Board.

§ 8.2. Updates on Professional Activities

A. The Board shall require from radiologic technologist's and radiologic technologist - limited's licensed or applying for licensure in Virginia, reports concerning their professional activities as shall be necessary to implement the provisions of these regulations.

B. A minimum of 320 hours of practice shall be required for licensure renewal for each biennium. Traineeship hours shall not apply.

C. Any radiologic technologist or radiologic technologist - limited who fails to meet the requirements of subsection B of this section shall be considered to have been inactive since the professional activity requirement was last satisfied and the license shall be deemed to have expired and become invalid.

§ 8.3. Traineeship Required for Relicensure

A. Any radiologic technologist or radiologic technologist - limited seeking relicensure who has been inactive for a period of two years or more pursuant to § 8.2. who wishes to resume practice shall first successfully complete a traineeship and other requirements specified below:

1. For any radiologic technologist or radiologic technologist - limited who has had an inactive practice for a period of two to six years, a fulltime traineeship of 320 hours for each biennium of inactivity.

2. For any radiologic technologist or radiologic technologist - limited who has had an inactive practice for a period of six or more years, a fulltime traineeship of 960 hours, and successfully passing the respective current licensure examination approved by the Board.

B. The first 320 hours of an inactivity traineeship shall be successfully completed in a hospital as defined in § 32.1-123 and approved by the Board that provides care to both inpatients and outpatients, is JCAHO approved, and is under the direct supervision of a radiologic technologist. The remaining hours of an inactivity traineeship shall be successfully completed in a facility approved by the Board.

1. The radiologic technologist supervising the radiologic technologist or radiologic technologist - limited shall submit a progress report to the Deputy Executive Director at the end of each successive 320 hours. These reports will be submitted on forms supplied by the Board.

a. If the traineeship is not successfully completed at the end of a 320 hour segment, as determined by the supervising radiologic technologist, the Chairman of the Radiologic Advisory Committee or his designee shall determine if a new traineeship shall commence.

If the Chairman of the Radiologic Advisory Committee determines that a new traineeship shall not commence, then the application for licensure shall be denied.

b. If the traineeship is not successfully completed at the end of a 320 hour segment, and the Chairman of the Radiologic Advisory Committee determines that the applicant may commence with a new traineeship, then the traineeship shall be served in compliance with § 8.3. A progress report shall be provided at the end of each successive 320 hours. If the second traineeship is not successfully completed at the end of a 320 hour segment, then the application for licensure shall be denied.

§ 8.4. Failure to Pass Examination

A. An applicant who fails the examination after three attempts shall be required to satisfactorily complete a 640 hour full time traineeship approved by the Chairman of the Radiologic Advisory Committee or his designee, prior to being eligible for three additional consecutive attempts. The traineeship shall be in a facility approved by the Radiologic Advisory Committee.

B. The radiologic technologist supervising the trainee shall submit a progress report to the Deputy Executive Director at the end of each successive 320 hours. These reports will be submitted on forms supplied by the Board. If the traineeship is not successfully completed at the end of a 320 hour segment, then the application for licensure shall be denied.

C. An applicant who fails the examination after six attempts shall be denied licensure.

PART IX
Fees

§ 9.1. Fees required by the Board:

A. The fee for the radiologic technologist examination shall be $150.

B. The fee for the radiologic technologist - limited examination shall be $50 for each specific examination.

C. The fee for licensure by endorsement for the radiologic technologist shall be $100.

D. The fee for licensure by endorsement for the radiologic

technologist - limited shall be $50.

E. The fees for taking the Radiologic Technologist or Radiologic Technologist - Limited examination(s) are non-refundable. An applicant may, upon request 21 days prior to the scheduled exam, and payment of the $50 fee, reschedule for the next time such examination is given.

F. The fee for license renewal for a radiologic technologist shall be $100 and shall be due in the licensee's birth month, in each even numbered year. An additional fee to cover administrative costs for processing a late application shall be imposed by the Board. The additional fee for late renewal of licensure shall be $25.

G. The fee for license renewal for a radiologic technologist - limited shall be $25 for each specific license, and shall be due in the licensee's birth month, in each even numbered year. An additional fee to cover administrative costs for processing a late application shall be imposed by the Board. The additional fee for late renewal of licensure shall be $25.

H. Lapsed License: The fee for reinstatement of a radiologic technologist or radiologic technologist - limited license issued by the Board of Medicine, which has expired for a period of two years or more, shall be $50 and the respective licensure fee, and must be submitted with an application for licensure reinstatement.

I. Upon written request from an applicant to withdraw his application for licensure by endorsement a fee of $25 shall be retained by the Board of Medicine as a processing fee.

J. The application fee for a traineeship shall be $25.

K. The fee for a letter of good standing or verification to another state for licensure shall be $10.

L. The fee for reinstatement of a revoked license shall be $500.

\radio.95-97

APPENDIX 3:

HJR 665, 1993

HJR 190, 1994

HJR 617, 1995

LD9197114

HOUSE JOINT RESOLUTION NO. 665

Offered January 26, 1993

Establishing a joint subcommittee to study the public health implications of licensing radiological technology practitioners.

Patron—Armstrong

Referred to the Committee on Rules

WHEREAS, the delivery of quality health care services is dependent upon the expertise of varied health care professionals, technicians, and assistants; and

WHEREAS, many physicians, podiatrists, chiropractors, dentists and veterinarians employ technicians or assistants to perform tests, including the administration of X-rays; and

WHEREAS, X-rays are a source of ionizing radiation which is potentially dangerous as a possible cause of cancer and genetic damage; and

WHEREAS, the need to protect the public and health care employees from unnecessary and dangerous exposure is acute; and

WHEREAS, the interpretation of X-rays is an important diagnostic and treatment tool and accurate interpretation depends on a well-taken X-ray; and

WHEREAS, the technician who takes the X-ray plays a crucial role in preventing retakes of X-rays and in securing a clear, readable X-ray; and

WHEREAS, in 1988 the Secretary of Human Resources appointed a task force to study the needs of X-ray technicians and their practice and the results of that study are published in House Document No. 31, 1989; and

WHEREAS, currently radiological technology practitioners may be certified pursuant to §§ 54.1-2956.6 and 54.1-2956.7, which means that only those practitioners who have met certain examination requirements may call themselves certified radiological technology practitioners, but does not exclude an untrained person from operating an X-ray machine; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, that a joint subcommittee be established to study the public health implications of licensing radiological technology practitioners. The joint subcommittee shall determine the level of training and expertise desirable for radiological technology practitioners and the effect that licensure of such practitioners would have on health care costs and accessibility.

The joint subcommittee shall be composed of seven members as follows: four members of the House of Delegates to be appointed by the Speaker of the House and three members of the Senate to be appointed by the Senate Committee on Privileges and Elections. The Department of Health Professions and the Department of Health shall provide such assistance as is necessary to the joint subcommittee.

The joint subcommittee shall submit its findings and recommendations to the Governor and the 1994 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for processing legislative documents.

The indirect costs of this study are estimated to be $8,255; the direct costs of this study shall not exceed $3,780.

Implementation of this resolution is subject to the subsequent approval and certification of the Joint Rules Committee. The Committee may withhold expenditures or delay the period for the conduct of the study.

GENERAL ASSEMBLY OF VIRGINIA -- 1994 SESSION

HOUSE JOINT RESOLUTION NO. 190

Continuing the Joint Subcommittee Studying the Public Health Implications of Licensing Radiologic Technology Practitioners.

Agreed to by the House of Delegates, February 10, 1994

Agreed to by the Senate, February 28, 1994

WHEREAS, X-rays are a source of ionizing radiation which is potentially dangerous as a possible cause of cancer and genetic damage; and

WHEREAS, the long-term effects of the application of ionizing radiation is difficult to determine, given the nature of the potential damage, because medical experts continue to be able to link damage with events that happened tens of years prior; and

WHEREAS, the delivery of quality health care services is dependent upon the expertise of varied health care professionals, technicians, and assistants; and

WHEREAS, the technician who takes an X-ray plays a crucial role not only in preventing retakes of films and thus preventing additional exposure but also in the accurate diagnosis of health problems which can be accomplished with a well-taken X-ray; and

WHEREAS, current state law allows for the certification of radiologic technologists but the program has been underutilized and is provided merely for title protection; and

WHEREAS, all Virginia hospitals either train their own personnel to be radiologic technologists or require certification by the passage of a national competency exam; and

WHEREAS, there are a number of radiologic technologist training programs in the Commonwealth at various hospitals, community colleges, and other institutions; and

WHEREAS, the Joint Subcommittee Studying the Public Health Implications of Licensing Radiologic Technology Practitioners has endorsed the concept of licensure for radiologic technologists based upon the belief that all Virginians deserve a minimum standard of health care; and

WHEREAS, the joint subcommittee has introduced a bill to require licensure for radiologic technologists based on a two-tier licensing process whereby (i) licensed radiologic technologists may perform diagnostic and treatment procedures with equipment which emits ionizing radiation, and (ii) radiologic technologists, limited, may perform such procedures on limited areas of the human body; and

WHEREAS, the joint subcommittee has requested the Board of Medicine in developing regulations for the implementation of such licensure to report back to them prior to the submission of such regulations for public comment under the Administrative Process Act; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Joint Subcommittee Studying the Public Health Implications of Licensing Radiologic Technology Practitioners be continued for the purpose of receiving the report from the Board of Medicine of the proposed regulations governing the licensure of radiologic technologists.

The direct costs of this study shall not exceed $ 1,050.

The Division of Legislative Services shall provide staff support for the study. All agencies of the Commonwealth shall provide assistance to the joint subcommittee, upon request.

Implementation of this resolution is subject to subsequent approval and certification by the Joint Rules Committee. The Committee may withhold expenditures or delay the period for the conduct of the study.

HOUSE JOINT RESOLUTION NO. 617

Continuing the Joint Subcommittee Studying the Public Health Implications of Licensing Radiologic Technology Practitioners.

Agreed to by the House of Delegates, February 4, 1995
Agreed to by the Senate, February 21, 1995

WHEREAS, X-rays are a source of ionizing radiation which is potentially dangerous as a possible cause of cancer and genetic damage; and

WHEREAS, the long-term effects of the application of ionizing radiation is difficult to determine, given the nature of the potential damage, because medical experts continue to be able to link damage with events that happened tens of years prior; and

WHEREAS, the delivery of quality health care services is dependent upon the expertise of varied health care professionals, technicians and assistants; and

WHEREAS, the technician who takes an X-ray plays a crucial role not only in preventing retakes of films and thus preventing additional exposure but also in the accurate diagnosis of health problems which can be accomplished with a well-taken X-ray; and

WHEREAS, current state law allows for the certification of radiologic technologists but the program has been underutilized and is provided merely for title protection; and

WHEREAS, all Virginia hospitals either train their own personnel to be radiologic technologists or require certification by the passage of a national competency exam; and

WHEREAS, there are a number of radiologic technologist training programs in the Commonwealth at various hospitals, community colleges, and other institutions; and

WHEREAS, the Joint Subcommittee Studying the Public Health Implications of Licensing Radiologic Technology Practitioners has endorsed the concept of licensure for radiologic technologists based upon the belief that all Virginians deserve a minimum standard of health care; and

WHEREAS, the 1994 General Assembly approved legislation to require licensure for radiologic technologists based on a two-tier licensing process whereby (i) licensed radiologic technologists may perform diagnostic and treatment procedures with equipment which emits ionizing radiation; and (ii) radiologic technologists, limited, may perform such procedures on limited areas of the human body; and

WHEREAS, the legislation, Chapter 803 of the 1994 Acts of Assembly, requires the Board of Medicine to develop regulations for the implementation of the licensure of radiologic technologists and to report to the joint subcommittee before the submission of such regulations for public comment under the Administrative Process Act; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Joint Subcommittee Studying the Public Health Implications of Licensing Radiologic Technology Practitioners be continued for the purpose of receiving reports from the Board of Medicine of the proposed regulations governing the licensure of radiologic technologists.

The direct costs of this study shall not exceed $1,050.

The Division of Legislative Services shall provide staff support for the study. All agencies of the Commonwealth shall provide assistance to the joint subcommittee, upon request.

The joint subcommittee shall be continued for one year only and shall submit its final findings and recommendations to the Governor and the 1996 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

Implementation of this resolution is subject to subsequent approval and certification by the Joint Rules Committee. The Committee may withhold expenditures or delay the period for the conduct of the study.