

Becoming a professional: When good is not good enough

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RIS as Professionals

- Practitioners in the radiologic and imaging sciences have always seen themselves as professionals and have acted accordingly.
- However, according to the legal and societal definitions, the field of radiologic and imaging sciences is only in the process of meeting the legal definition of a profession.

We are growing as a profession

- The number and quality of people running for AEIRS office impressive.
 - Hard to decide who to vote for in last election.
- The number of technologists in the profession who have a baccalaureate is nearing a critical mass.
- Number of educators with doctoral degree encouraging.

History and Landscape of Radiologic and Imaging Sciences

History

- In October 1920, Jerman and 13 technician acquaintances met in Chicago to establish the first national technician society, the American Association of Radiological Technicians.
- The American Registry of Radiologic Technologists founded in 1922.
 - No formal education required to sit for test.
- RSNA recommended one year of education in 1933.

More History

- In 1940s and early 1950s, only requirement were two years of experience and a radiologist's reference to be Registry eligible.
- In 1952, the ASXT made its first foray into establishing formal educational standards for the profession with one year of 'training' required and two years preferred.
- Also, in 1952, a model standardized curriculum with minimum instructional times developed.
- Educational standards lengthened to two years education in 1960.

Yet More History

- Puerto Rico began licensing radiologic technologists in 1963.
- In 1966, the Registry restricted eligibility to graduates of accredited programs.
- In 1968, ASRT asked the federal government to establish standards regulating the licensure of radiologic technologists.
- The JRCERT was created in 1969.
- In 1969, accredited programs were required to be 24 months in length.
- In 1975, the ASRT designed a voluntary continuing education program.

Bring us up to today

- In 1979, the NLRB ruled that technologists were not professionals.
 - RTs did not meet all requirements to practice independently, have specialized knowledge and standards of practice, and restricted entrance into their profession through education, certification and licensure.
- In 1981, Congress passed the Consumer-Patient Radiation Health and Safety Act.
- In 1995, the American Registry of Radiologic Technologists (ARRT) made continuing education mandatory as a condition for the annual renewal of technologists' certifications.
- An associate degree required for eligibility in 2015.

So, Are We Professionals?

Legally: NO!
Societally: Maybe but mostly no.

Legal Definitions of “Professional”

According to US Code of Federal Regulations

- “...professional means occupations requiring either college graduation or experience of such kind and amount as to provide a background comparable to college education.” 41 CFR 61-250.2

US Bureau of Labor Statistics (BLS) Profession Definition

- “This Major Occupation Group (MOG) includes occupations concerned with the study, application, and/or administration ... laws, principles, practices or theories. ... Most MOG occupations require educational preparation.”

Comparative Educational Requirements

BSc Degree Minimum to Practice In Most Developed Countries

- Most European countries including Great Britain
- South Africa
- New Zealand
- Australia
- Japan
- Singapore
- Several provinces in Eastern China
- Saudi Arabia
- Kuwait
- Plus many more

US BLS List of Health Professions

- All require a minimum of BS degree:
 - Registered Nurses
 - Pharmacists
 - Dietitians
 - Respiratory Therapists
 - Occupational Therapists
 - Physical Therapists
 - Speech Therapists
 - Physicians' Assistants

US BLS Health Technicians

- 2 year or less entry requirements in US
 - Clinical Laboratory Technicians
 - Dental Hygienists
 - Health Record Technicians
 - Radiologic Technicians
 - Licensed Practical Nurses

So, we don't meet the educational criteria and are seen as 'Technicians'

US BSL Technical Occupation definition

- These occupations are involved in carrying out technical and technological functions in health, engineering, science, and other disciplines.
- May perform research, development, testing and related activities.
- May operate technical equipment and systems.

US BLS Radiologic Technicians

- Operate radiological equipment to produce radiographs (X-rays) of body for diagnostic purposes as directed by radiologist.
- Also provide radiological therapy and prepare and administer radiopharmaceuticals in diagnostic and therapeutic studies.
- Include CAT scanner operator, ultrasound technologist, isotope technician, radiation therapy technician, etc.

Societal Expectations of a Profession

Major Milestones of a Profession

- Establishment of a university school
 - Establishment of a local association
 - Establishment of a national code of professional ethics
 - Establishment of state licensing laws
- Perks, R. W. (1993): Accounting and Society. Chapman & Hall (London); ISBN 0-412-47330-5. p.2.

Some Common Expectations

- Society expects that the profession will ensure the competence of each [practitioner] by setting and maintaining standards for education, training, and practice—and by disciplining incompetent, unethical, or unprofessional conduct.
- [Practitioners] are expected to demonstrate morality and integrity in their practice, and in their day-to-day lives.
- Promotion of the public good.
- Transparency.
- Accountability.

More Expectations

- [Practitioners] expect to be granted sufficient autonomy to act in the best interests of their patients.
- Because society appears to accept that licensure leads to higher standards, and because of the long education and training required, [medical professions] expects that the monopoly will be maintained.
- Society has decided that it is in its own best interests to allow the profession to set and maintain standards and carry out disciplinary procedures.

Modified from Cruess, S. R. & Cruess, R. L. (2004) Professionalism and Medicine's Social Contract with Society. *AMA Journal of Ethics*, 6(4).

Licensure

- 42 states license radiographers
- 38 states license radiation therapists
- 27 states license nuclear medicine technologists
- 31 states license radiologists assistants
- But many of these laws are under attack!

So, we meet only some of society's expectation of what a profession is.

So, We Really Have a Problem
What to do?

As Individual Professionals

- Modeling behavior for students.
 - Memberships, involvement, public scholarly activities. Involve students when possible.
- Encourage students to think long term to get BS and Master's degree routinely.
 - It's necessary to overcome 'it's a waste of time to have a degree to be a ...' forces in clinical sites.
- Encourage new faculty to have scholarly activity roadmap and theme and to earn doctoral degrees.
- Encourage students to see they can become the professionals that society expects.

What the Profession Might Do

- Think nationally but act locally.
- Communities of Practice through AEIRS, ASRT, SNM, SDMS, ASTRO, etc.
 - Collaboration is the key.
- Encourage more incubators like Midwestern State in TX, Northwestern State in LA, Armstrong State in GA, and Thomas Jefferson in PA.
- Develop mechanism for the majority of students to earn a baccalaureate degree.
- Expand the number of master's degrees in the profession.
- Implement doctoral degrees in the profession.
- Implement more mechanism to develop and disseminate our own body of knowledge.

Its Not All Bad

- I have seen major changes in the profession over time.
- We are so much better off now than previously.
- I am optimistic about where we are going
 - We just need to agree to work together to make it happen.
