

VOLUME NO. 38

OPINION NO.88

DEPARTMENT OF PROFESSIONAL & OCCUPATIONAL LICENSING -  
Licensure requirements for administration of contrast media;  
LICENSES, OCCUPATIONAL AND PROFESSIONAL - Contrast media  
administration by professional nurses;  
NURSES, REGISTERED - Administration of contrast media;  
RADIOLOGIC TECHNOLOGISTS - Administration of contrast media,  
lack of authority for;  
MONTANA CODE ANNOTATED - Sections 37-8-102, 37-14-301.

HELD: Licensed professional nurses, but not licensed  
radiologic technologists, may inject contrast  
media into patients for the purpose of taking  
diagnostic x-ray images in the body.

14 July 1980

Ed Carney, Director  
Department of Professional  
and Occupational Licensing  
42½ North Last Chance Gulch  
Helena, Montana 59601

Dear Mr. Carney:

You have requested my opinion on the following question:

Whether both radiologic technologists and profes-  
sional nurses may inject fluids known as "contrast  
media" into patients for the purpose of taking  
diagnostic x-ray images in the body.

For reasons of public policy the Legislature has sought to regulate and control the practices of professional nursing and radiologic technology by prescribing licensure requirements for each. See Title 37, chapters 8 and 14, MCA, respectively. These statutes attempt to define the practices they cover, and in general prohibit unlicensed persons, or those not exempted, from engaging in those practices. Your question arises because neither chapter mentions the injection of "contrast media" into patients and therefore it is not apparent whether such injections may be administered by licensed professional nurses, licensed radiologic technologists, or both.

The procedure in question involves the use of a "contrast medium," an agent (gas or fluid or other material) which is opaque to x-rays and therefore creates a shadow on a radiograph outlining the part of the body into which it is injected. Radiologic examination procedures employing contrast media include angiography (injection of contrast medium into arteries and veins), pneumography (injection of contrast medium into chest, abdomen, spinal canal, brain) and lymphography (injection of contrast medium into lymphatic channels), to name a few. It is generally accepted that such procedures involve some risk to the patient, and "virtually all...have a small morbidity and mortality rate in the best of hands." 4 Lawyers' Medical Cyclopedia § 29.1b, at 3 (Rev. Ed. 1975).

The applicable provision in chapter 8 of Title 37 is section 37-8-102(3)(a), MCA, which defines "practice of professional nursing" as:

[T]he performance for compensation of an act in the observation, care, and counsel of the ill, injured, or infirm or in the maintenance of health or prevention of illness of others or in the supervision and teaching of other personnel or the administration of medications and treatments prescribed by a person licensed in this state to prescribe medications and treatments, requiring substantial specialized judgment and skill and based on knowledge and application of the principles of biological, physical, and social sciences.

The "practice of professional nursing" has not been defined to specifically include the injection of contrast media into patients. Nor, for that matter, is the injection of any substance made a part of that definition. As recognized in 26 Op. Att'y Gen. No. 89 at 142 (1956), the statutory definition of professional nursing is general and does not delineate all aspects of professional nursing practice. Concluding that intravenous injections could be carried out by a professional nurse, as "part of the nurse's role in the doctor-nurse team," that opinion focused on the nature of professional nursing. It should be noted that the definition Attorney General Olsen consulted did not contain the phrase "administration of medications and treatments...", which was added as part of a later revision of the definition of the "practice of professional nursing." See Mont. Laws, ch. 291, § 2. With the inclusion of that phrase,

in my judgment, the definition is clearly broad enough to include the injection of contrast media into patients to facilitate x-ray studies. Therefore, I conclude a licensed professional nurse may perform that procedure.

A radiologic technologist is on different footing. Under the applicable statute, section 37-14-301(2), MCA, a licensed radiologic technologist:

[M]ay apply x-ray radiation to persons for medical, diagnostic, or therapeutic purposes under the specific direction of a person licensed to prescribe such examinations or treatments.

As you have pointed out, the operative phrase "apply x-ray radiation" has significant meaning. It could reasonably encompass positioning the film and the patient, and the placement of impervious shielding, for example.

However, in my opinion the injecting of a contrast medium into a passage, organ or tissue cannot be equated with those activities, and is sufficiently distinct from "applying x-ray radiation" to be beyond the scope of that phrase. If the Legislature chose to expand the authority granted to licensed radiologic technologists it could do so, presumably raising licensure requirements accordingly. I am unwilling to read such expansion into the existing statutes, and therefore conclude that a licensed radiologic technologist may not inject contrast media into patients.

THEREFORE, IT IS MY OPINION:

Licensed professional nurses, but not licensed radiologic technologists, may inject contrast media into patients for the purpose of taking diagnostic x-ray images in the body.

Very truly yours,

MIKE GREELY  
Attorney General