

Testimony Re: HB 2698
House Health and Human Services Committee
By Doug Billings
On behalf of
Kansas Society of Radiologic Technologists
February 16, 2004

I am Doug Billings. I am a Registered Technologist in Radiography and a Registered Nuclear Medicine Technologist. I am a Past-President of the Kansas Society of Radiologic Technologists and a member of the American Society of Radiologic Technologists, Kansas Society of Radiologic Technologists, Society of Nuclear Medicine and the American Society of Nuclear Cardiology. I have been in the profession for nearly 22 years. During my twenty plus years, I have always been involved by doing what I can to better myself as well as my profession. I spoke last year to the committee on a number of facts, statistics and studies concerning radiation and health concerns. I would encourage you to review testimony from February 18 on KSRT HB 2274. I do not want to be repetitious or overwhelm you with all the same figures. I would like to speak to you today about some additional information and some areas of concern for the people we serve.

Over the last two years alone I have documented over one hundred ten hours of continuing education. The documented hours do not include the countless journal articles and internet articles I have read to keep up with my profession. Medicine and radiology in particular, are very dynamic. Therefore it is important for technologists to continue to educate themselves about their profession. Registered Technologists are required by their license to acquire a minimum 24 hours of continuing education over a two year period. Continuing education helps to develop technologists skills and keep them aware of what is going on in the profession. The continuing education requirements are above and beyond the two years of education and clinical experience required to take the national boards for Radiologic Technology.

Taking an x-ray does not simply require placing a patient or body part on a table and pushing a button. It is so much more. There are hundreds of specific positions a technologist must know to properly image a person with x-rays. In addition to the number of positions, a technologist must also know how to make adjustments for different patients. A newborn baby, an eighty year old frail grandmother confined to a wheelchair or a four hundred fifty pound man injured in an auto accident all require different imaging factors. These are not easy adjustments to make. Proper training is essential. All three of these patients would require a multitude of different positions, adjustments and radiation exposure settings. A technologist would not use the same settings to image all three. Believe it or not, an unqualified person taking an x-ray in most cases, would. I know this for a fact. I called and spoke to the individuals taking the x-rays in a number of sites in Western Kansas. Some of those I spoke to were office managers, clerks and labtechs, to name a few, who had absolutely no idea what they were doing. They typically open the systems wide open and shoot. If it doesn't turn out right,

they make some adjustments and shoot another x-ray. They continue doing so until something turns out. This is not acceptable. Where is the concern for the safety and rights of the patient. How can a dollar value be place on these patients health and safety?

I do a variety of nuclear medicine procedures. One procedure I do frequently is called a bone scan. We inject a patient with a radioactive medication and allow it time to accumulate in the bones. After a few hours we image the body to look for abnormal areas of accumulation of the radioactive drug. The procedure is very expensive and yields metabolic information about the bones. It is used to aid in the diagnosis or staging of cancers, fractures, arthritic changes, infection and unexplained bone pain. With a little background on bone scans, I want to tell you about a conversation I had with a licensed practitioner last year. The licensed practitioner called to schedule a bone scan. I spoke with him about getting the patient in the next day for the bone scan. We routinely request the patient bring any outside films for comparative purposes. If there is an area of suspicion the radiologist will correlate the data from the bone scan with the x-ray. I made the request to the licensed practitioner to send the patients x-rays to us. He replied they probably would not be helpful. I told him the Radiologist who will be interpreting the study would prefer to have them to aid in the interpretation if at all possible. He then replied he was a little bit embarrassed. He said the x-rays were so bad you really could not see anything on the film because they were so dark. He then said he would be willing to add an x-ray to the order for the bone scan and we could get them at the same time. I would like to make a few points: 1) the original was terribly overexposed meaning the patient received at the very least double the exposure of radiation, 2) the patient was unaware the x-ray taken in the office was worthless, 3) the repeat x-ray at the hospital required additional radiation exposure and cost, 4) a good initial x-ray may not have required a very expensive bone scan. We see several cases exactly like this each month. We are one site in Kansas, imagine if you will, the number of times this happens across the State of Kansas each week.

I had another case several years ago when I was covering CAT scan call. I was called on a Saturday morning to do a STAT chest CT on a man in his late thirties. When I arrived in the Radiology Department the man and his wife were in the waiting room crying. The man had been told it looked like he had lung cancer. I asked the gentleman if I could review his chest x-rays before I took him back for his CT. I then went to our review area and hung his films up on the viewing box. The chest x-ray x-ray was unbelievable. The chest x-ray showed fluffy infiltrates throughout both lung fields. These by themselves certainly were cause for concern. However, the fluffy infiltrates extended into the shoulders, neck and outside the body. I asked the gentleman if he would mind letting me take another chest x-ray. The chest x-ray I took showed perfectly normal lungs. The patient was very upset at all he had gone through because of a terrible chest x-ray. The chest x-ray was reportedly taken by the office manager. It had a number of problems. There was no identification to show it was even this patients x-ray. The film was overexposed, the chemicals for processing were, old creating the false abnormalities, there were scratches all over both films, the patients chin was included in the film and a variety of other issues. This is not an isolated occurrence. We also see an unbelievable number of cases very similar to this.

We had another patient last year who was told she had a big lung tumor. She was sent in for a chest CT. Our registered CT technologist reviewed her x-rays and realized the office person who took her x-rays did not have the patient remove her bra. The mass shown on the x-rays was a breast prosthesis in her bra due to a prior mastectomy. This patient drove from out of town to see how bad her lung tumor was. We also repeated her chest x-ray to show it was normal. She had at least twice the x-rays, unnecessary concern, increased cost and had to drive for an appointment out of town she did not need. These cases also occur on a weekly basis all across our State.

These are examples of over diagnosis based on poor quality exams. Imagine for a moment the number of disease processes and cancers missed for the same reasons. The next time you visit your physician for an annual physical will you wonder if your chest x-ray is truly okay. Maybe it was over- or under-exposed. Maybe as a result you have a small lesion that will continue to grow beyond a treatable state. If the original x-ray had been properly performed maybe you would have another ten to twenty years of life rather than only one. We see a number of cases every year that are sad and preventable. There must be a means for requiring people taking x-rays in the State of Kansas to be properly qualified. I can not imagine how the facts can continue to be ignored. It is up to you, the committee, to make an appropriate decision for not only the health and safety of the people you represent, but also for yourselves.

Please, as I mentioned earlier, review the data I supplied in previous committee hearings. The facts are very real. We have supplied everything requested and have worked diligently to address concerns of our opponents to this bill. Many concessions have been made to try to accomplish our goals. Our sincere goal in this bill is to provide safe and accurate diagnostic radiology exams for our patients, most of which have no idea how poor their Radiology care may be. Thank you once again for your consideration of this important bill.