

Testimony Re: HB 2698
House Health and Human Services Committee
Presented by Dr. James Owen
on behalf of
Kansas Society of Radiologic Technologists
February 16, 2004

I am Dr. James Owen. I am a diagnostic radiologist –a member of the medical specialty that deals with x-rays and other forms of diagnostic imaging. I am a Fellow of the American College of Radiology, past President of the Kansas Radiological Society and the Councilor representing the state of Kansas to the Council of the American College of Radiology. I am speaking today representing the KRS, which has previously gone on record in support of legislation to set minimum standards governing the quality of x-ray exams in Kansas. Similar legislation already exists in thirty-seven other states. Both the KRS and the ACR have a long history of support for quality standards in patient care. The ACR, for example, spearheaded the Mammography Quality Standards Act, which has become the premier example of how standards can be used to improve quality of care. I should preface my remarks by saying that, in general, I am opposed to excessive government regulation and intervention. That should only take place when absolutely necessary to safeguard the public. I believe that the performance of x-ray exams is such a case.

I would like to provide a little background information. There are three components to an x-ray procedure: 1) the equipment, 2) the generation of the x-ray itself and its recording on film, and 3) its professional interpretation. Equipment, by statute, is supposed to be monitored by the KDHE and is not addressed by this bill. The professional interpretation is rendered by a physician. Again, by statute, any licensed physician can provide that interpretation and they are under the regulation of the Board of Healing Arts. The actual generation of the exam is the one area with no oversight whatsoever and no standards. Consequently, it is subject to the highest variability.

Is this a problem? We believe that it is a substantial problem. First of all, the quality of x-ray images is perhaps the single most variable “product” in healthcare in Kansas. That is largely a reflection of the training, knowledge and capabilities of the person generating the images. Most patients presume that the person taking their x-ray knows what he or she is doing. In a great many cases, nothing could be further from the truth. They also presume that their doctor oversees the quality. Again, with the exception of radiologists, most physicians receive no training in x-

ray image assessment, and not only are unable to give guidance to the radiographer, they are often unable to determine if the x-ray is even acceptable to interpret.

What problems does this create? There are primarily three: 1) generation of x-rays that are technically inadequate to render a diagnosis, 2) unnecessary radiation exposure to the patient and 3) cost. Poor quality radiographs can make it difficult, if not impossible, to make a diagnosis even in the best of hands. The likelihood of missing a lung cancer on a chest x-ray, for example, goes way up as the quality of the x-ray goes down. My practice, based here in Topeka, interprets x-rays for some forty different locations across northeast and east central Kansas. We have, over the years, been asked by numerous other sites to provide professional interpretations for their exams, and, after an initial assessment, have declined to do so because the films were of such poor quality as to render them, in our opinion, uninterpretable. Those exams are still being performed; they're just not being read by us. This is also not an urban vs. rural issue – we see just as many poor quality images generated around Topeka, Wichita and Kansas City as in rural areas of the state.

Not only does this create problems in initial diagnosis, it also leads to unnecessary additional exams such as the technically inadequate chest x-ray that leads to an unnecessary CAT scan to prove that there is nothing wrong, or the person admitted to the hospital who, as a first step, has to have his basic x-rays repeated so we know where to start in his evaluation. There is, therefore, also a financial cost to this, with which the state, as the administrator of Medicaid, should be fiscally concerned.

Regarding unnecessary radiation exposure, this has two sources. First, patients get excess radiation when the radiographer fails to collimate, or limit, the exposure to just the area in question, and fails to use the proper technique. Second, it occurs when films have to be repeated because they were badly exposed. This happens to all techs occasionally, for a variety of reasons, but it is a bigger problem when the person with his finger on the button has no training. I am aware, for example, of an instance in Topeka in which a child had his face radiated twelve times before the untrained radiographer finally quit trying to get a satisfactory exam of his sinuses. This, to me, is unacceptable.

Who takes x-rays now? This is a picture of extremes. On the one hand are radiologic technologists (R.T.s), persons who have completed two years of classroom and practical training followed by a national board examination. At the

opposite extreme could be, quite literally, ANYONE else. In one practice near Topeka of which we are aware, the x-rays were taken by a girl whose last job was scooping ice cream at Dairy Queen. Her training consisted of being told to “press the button”. She had no idea of how to vary the exposure, let alone correct a problem. It turned out her films were coming out black because she didn’t know the chemicals in the processor needed to be changed monthly (she had never changed them) and that the temperature of the developer was critical (she had no thermometer). Her solution to try to get an x-ray was to just crank up the voltage. It is this sort of situation that we wish to correct.

What do radiographers really need to know? Many people mistakenly believe that it truly is a “push the button” business. There is a long list of technical parameters of which the radiographer needs to be aware and deal with on every x-ray he or she takes. The process is easiest at the largest hospitals and offices where they can afford more modern and semi-automated equipment. Ironically, that is also where the best-trained radiographers are.

It is our opinion that this is a problem worthy of correction, and one which can be addressed fairly easily by requiring a minimum amount of training and accountability such as this proposed legislation provides. A stronger bill was considered by this committee last year. Opposing arguments and my responses to them were as follows:

- 1) This is unnecessary regulation and intrusion into a physician’s or hospital’s practice of medicine.

As I indicated, I too am opposed to unnecessary regulation. Hopefully, you see why I believe that this is truly needed. Personally, I find it incredible that one has to be licensed to cut hair in Kansas, but not to expose someone to radiation or determine whether or not they have a life-threatening condition.

- 2) There aren’t enough RTs to replace people not qualified.

It is true there is a shortage of RTs right now. Ideally, everyone taking x-rays would be an RT, but that is simply not practical at the moment. There are however alternatives, both in the short run and long term. In the short term, you could elect to grandfather in those people currently engaged in radiography with the stipulation that they become certified within, say, two or three years, and that any new radiographers be certified. In the long term, there are alternatives to full RT registration. The ARRT has for example a

track that permits limited licensure following a minimal education program. This could be used for those facilities that for whatever reason are unable to attract or support an RT. Lastly, this legislation provides for a mere registration process so that BOHA can at least be aware of who is performing limited radiography but is not trained to the extent necessary to obtain licensure. This will negatively impact small rural hospitals and practices.

The same approach described above would address this concern. Limited licensure would permit existing radiographers to acquire the minimum training needed to be marginally safe with little effort or cost. Registration would permit BOHA to track persons who are untrained and to attempt to increase their education and their competency. Thirty-seven other states, including rural states, already require radiographer licensure. Clearly they have made it a priority and found a way to make it work. That number should also make it clear that we are in a distinct minority in our failure to safeguard patients through proper training. One should also consider that it might be possible that bad radiography is worse than none at all.

3) Cost.

The state would not have to incur any cost of developing and administering exams, since there is already a nationally recognized process through the ARRT. Costs of record-keeping should be born by those being certified, similar to other groups. The program would be under the Board of Healing Arts, so the infrastructure is already in place.

4) Dentists are exempted.

Frankly, it doesn't matter to me whether or not they are exempt, and I doubt it would matter to them. This legislation was designed to address a need. Dental radiography is limited to a single standardized exam, with limited exposure options using a machine that can be used for nothing else, and dental hygienists all receive appropriate radiographic education in their training programs. My personal perception is that there is not a problem with them.

5) This interferes with physician autonomy and we know what's appropriate.

As I indicated earlier, most physicians have no training in radiographic quality assessment. In addition, every other aspect of their practice has oversight. Furthermore, there are worse things than state regulation. Previously, states failed to adequately monitor clinical laboratory work in physician's offices. The result was CLIA – federal legislation that essentially shut down most office laboratory work completely amid a mountain of regulatory requirements. Personally, I would prefer to see regulation be done at the local level.

6) This is an attempt to shift all of the x-ray interpretations to radiologists.

As I indicated, this legislation says nothing about who interprets the studies, and the BOHA places no restrictions on individual practitioners. A large percentage of x-rays in Kansas are interpreted by nonradiologists and we, as radiologists, have no desire to alter that. In addition, there is a shortage of radiologists, just as there is a shortage of technologists, and we couldn't handle the increased workload if we had to.

Over the last few months, the issues involved in last year's bill were discussed by several of the organizations that had opposed it. What you see before you for your consideration now is a proposal substantially reduced in its scope. While it is certainly not the legislation we would like to see enacted, it hopefully addresses most of the previous concerns and would still represent an improvement over our present system and a good first start toward safeguarding our patients.

Hopefully, I have once again made it clear that there is a quality problem in Kansas related to radiographers and that citizens are being harmed as a result. Our role as physicians is to be advocates for our patients. That should also be the goal of the legislature and the state regulatory environment. The desire of the Kansas Radiological Society is to do what we can to improve patient care and ensure safe, diagnostic studies for the people of Kansas. We strongly believe this legislation would represent a good first step toward that goal. Thank you for your attention and consideration.