

**RADIOLOGIC TECHNOLOGY CERTIFICATION COMMITTEE (RTCC)
MEETING MINUTES**

April 2, 2014

Doubletree Hilton, Los Angeles Downtown
Golden State Ballroom
120 South Los Angeles Street
Los Angeles, California 90012

Frieda Y. Taylor, M.S., Chairperson

COMMITTEE MEMBERS PRESENT

Dale R. Butler, M.D.	Todd D. Moldawer, M.D.
Diane R. Garcia, MS, CRT, ARRT (R)(CT)	Linda L. Ortega, MS, CRT, ARRT(R)(CV)
John L. Go, M.D.	Michael L. Puckett, M.D., FACR
Johnson B. Lightfoote, M.D., FACR	Bonna Rogers-Neufeld, M.D., FACR
Neil Mansdorf, DPM	Cliff Tao, DC

COMMITTEE MEMBER ABSENT

Christopher H. Cagnon, Ph.D., DABR

STAFF

Ricardo Arriola, RTCC Coordinator	Lisa Russell, Supervising Health Physicist
Marilyn Cantrell, Senior Health Physicist	Phillip Scott, Senior Health Physicist
Jennifer Cole, Interim RTCC Coordinator	

ALSO PRESENT

Ms. Dawn Charman, El Camino College	Mr. Chet Rees, MD, FSIR, Baylor University
Ms. Barbara Hamrick, University of California, Irvine	Ms. Anita Slechta, California State University, Northridge
Ms. Lorraine Henry, Orange Coast College	Mr. Greg Weaver, CFI Medical
Ms. Kelly Holt, Orange Coast College	Ms. Lauren J. Wood, R.N., PhD, LP, ARRT
Ms. Nancy Perkins, Bakersfield College	Ms. Jennifer Yates, Merritt College
Ms. Diane Przepiorski, California Orthopedic Association	

MEETING SUMMARY

I. WELCOME / OPENING REMARKS

Chairperson Taylor called the meeting to order at 9:00 a.m.

Chairperson Taylor welcomed all meeting attendees and introduced the RTCC members and California Department of Public Health-Radiologic Health Branch (CDPH-RHB) staff as well as students from various schools. She then explained the meeting's timing process as well as the procedure to follow in the event of an evacuation drill.

II. APPROVAL OF OCTOBER 23, 2013 RTCC MEETING MINUTES

The committee members approved the October 23, 2013 RTCC meeting minutes as written.

Motion: Committee Member Moldawer

Second: Committee Member Go

Motion passed: Vote 9 Yes, 0 No, 1 Abstain (Dr. Mansdorf)

Chairperson Taylor stated that the approved minutes would be visible on the CDPH-RHB website no later than 30 days from the meeting's date. She noted a change in voting procedure for the Committee: as a matter of public record, the Committee Member's votes would be read aloud by the RTCC Coordinator. She then proceeded to identify herself as the first speaker.

III. STATUS OF PRIOR RTCC MOTIONS

Frieda Y. Taylor, M.S., RTCC Chairperson
Supervising Health Physicist
Registration and Certification Section

Chairperson Taylor explained that three presentations throughout the day would be made by Mr. Phillip Scott. The presentations would be addressing motions made at the October 23rd, 2013 RTCC meeting and were named as follows:

- Whole Body Composition and Scope of X-ray Bone Densitometry would address the Committee's recommendation to consider a whole body composition procedure to be within the scope of the existing x-ray bone

densitometry (XBD), permit category.

- Consideration of Eliminating Fluoroscopy Permit for CRTs would address the Committee's recommendation to eliminate the need for Certified Radiologic Technologists meeting certain conditions to obtain a Radiologic Technologist fluoroscopy permit.
- Consideration of RCIS Regulatory Fluoroscopy exception would address the Committee's recommendation to develop regulatory language allowing a Registered Cardiovascular Invasive Specialist (RCIS), if certain conditions are met to position the patient with fluoroscopy equipment during cardiac catheterization procedures without the need to obtain a Radiologic Technologist fluoroscopy permit or other California Department of Public Health authorizing permit.

Chairperson Taylor then introduced Mr. Phillip Scott, Senior Health Physicist.

IV. LEGISLATIVE AND REGULATORY UPDATE

Phillip Scott

Senior Health Physicist

Strategic Planning and Quality Assurance Section

Regulations Unit

Senior Health Physicist Phillip Scott updated the Committee and audience members of the following regulatory and/or legislative items:

1. Title 17 (Regulatory)
 - Revisions adopted in Title 17 took effect in early October, 2013.
2. Assembly Bill 356 (Legislative)

Regulations to implement AB 356 which would allow a Physician Assistant (PA) to obtain a Fluoroscopy permit also took effect in early October, 2013.
3. Assembly Bill 213 (Legislative)
 - AB 213 was designed to require all x-ray schools to establish procedures allowing veterans to use their experience and military

training as part of meeting the requirements to obtain a certificate or permit in nuclear medicine or in radiologic technology.

- That bill has died in committee and another one will have to be re-introduced at the next legislative session, which begins in January.

4. Radioactive Materials (Regulatory)

- Coming soon.

DISCUSSION

None

V. WHOLE BODY COMPOSITION (WBC) & SCOPE OF X-RAY BONE DENSITOMETRY (XBD) PERMIT

Phillip Scott

Senior Health Physicist

Strategic Planning and Quality Assurance Section

Regulations Unit

Senior health physicist Scott referred to the Fall 2013 Committee hearing and a presentation by Ms. Linda Ortega regarding considering the whole body composition procedure to be part of the x-ray bone densitometry permit that is issued by RHB.

- The Committee recommended that the whole body composition procedure be considered to be part of the existing scope of the x-ray bone densitometry permit category. At the next meeting, proposed language and most of the background material will be available for Committee consideration.
- Regarding regulations, fiscal and economic evaluations need to be done for any alternatives being proposed as well as the fiscal and economic impacts of the alternatives selected. Therefore, multiple State agencies may or may not have to be involved in the research.

DISCUSSION

COMMITTEE MEMBER LIGHTFOOTE: Would you just clarify the language which you find in the legislation which permits this extension of the regulation? And second, did you look at the volume of cases that might be done in the State?

SENIOR HEALTH PHYSICIST SCOTT: We would definitely be pulling that type of information as to how many are done in the State, who is doing them currently and what the current legal environment is for performing that.

The legislation states "The Department shall provide as may be deemed appropriate for granting limited permits to persons to conduct radiologic technology limited to the performance of certain procedures or the application of x-rays to specific areas of the human body, except for mammography, prescribe minimum standards of training and experience for these persons, and prescribe procedures for examining applicants for limited permits". We will look at how our authorizing law fits into that, as any regulation adopted has to be authorized within law.

With no further questions from the Committee, Chairperson Taylor introduced the next speaker, Dr. Lauren Wood of the American Registry of Radiologic Technologists (ARRT).

VI. FLUOROSCOPY EXAMINATION UPDATE

Dr. Lauren Wood, R.N. PhD, LP
Director of Psychometric Services
ARRT

Dr. Wood introduced herself and shared her professional background as an industrial psychologist and proceeded to share historical information about the ARRT.

Dr. Wood introduced the ARRT website, content and lists of certifications and examinations offered by ARRT, including the Registered Radiologist Assistant and the three State-based licensing exams which include limited scope, bone densitometry equipment operator and the fluoroscopy examination.

The fluoroscopy examination was developed with of the approval of subject matter experts such as a radiologist, two physicists, one registered radiologist

assistant, one Physician Assistant, five radiographers, one radiography educator, and an ASRT representative. Of those, three were from the State of California.

Dr. Wood spoke about the steps involved in certification and licensure testing development:

- A job analysis or what's normally called a practice analysis in health sciences.
- Develop a task inventory using a national survey.
- Develop questions for the examination.

The panel reviews the questions for their technical accuracy, they're written to the appropriate level of difficulty, confirmed that the content is current and up to date, and each question has a documented reference to verify that the answer is correct.

Dr. Wood noted that a number of measures were taken to inform the educational community as well as the community at large of changes from the California developed fluoroscopy examination to the ARRT fluoroscopy examination, including posting content online, in national reports and in the Title 21 Code of Federal Regulations.

Dr. Wood proceeded to share the passing statistics between the two exams, referring to her PowerPoint slides:

- January 1 – December 31, 2012
 - Number of examinees: 1,089
 - Technologist pass %: 88.1
 - Physician pass %: 80.2
- January 1 – December 31, 2013
 - Number of examinees: 831
 - Technologist pass %: 86.2
 - Physician pass %: 81.2
- Factors contributing to passing statistics:
 - Change in population of examinees from 2,098 (2012) to 1,608 (2013).
 - Different examination content relating to newer equipment and more modern guidelines.

- Exam Security: The exam questions have been around for many years and are no longer new or novel.
- Are there sufficient study materials for students? Yes, but they're different from years past.

Dr. Wood then shared ways to help examinees be successful:

- Go to the ARRT website and download the fluoroscopy content specifications, modernize your study materials to include digital and the modern regulations that are addressed in the content specifications, use materials that cover all of the content specifications.
- Consider spending additional time on Sections C and D, and become familiar with the abbreviations in the fluoroscopy examination content specifications.
- Visit the RTCC/RHB website for syllabus and study suggestions.

She then warned examinees against sharing test questions online or in person as such action may be met with litigation.

DISCUSSION

COMMITTEE MEMBER GO: I think it's deceptive to maintain that syllabus on the RHB website, since the content is different now than it was before. RHB website should provide an updated syllabus with relevant content for those people who are going to be taking the x-ray supervisor's license and taking the fluoroscopy examination. Since ARRT is the body that's actually administering the examination, perhaps you should provide the syllabus to be placed on the RHB website.

SENIOR HEALTH PHYSICIST CANTRELL: The syllabus is no longer on the website.

COMMITTEE CHAIRPERSON TAYLOR: Previously, the RTCC had a subcommittee with regard to the fluoroscopy syllabus, and Melissa Martin was the chairperson of that committee. Would you like to provide brief comments as to what the Committee did with regard to the prior syllabus and what you decided moving forward?

MS. MARTIN: It was basically decided that we would not put that on the

State website, because the ASRT made these modules available and keep them up to date.

COMMITTEE MEMBER LIGHTFOOTE: Does the RHB website contain clear pointers to two main resources, the ARRT specifications of content and the ASRT study materials? How much do they cost?

MS. MARTIN: Yes. It's approximately \$65 -- \$62, \$65 to download those modules.

COMMITTEE MEMBER LIGHTFOOTE: Is this same test used nationwide or in other states?

DR. WOOD: It is, indeed.

COMMITTEE MEMBER ORTEGA: The examinees need to go from module to module to get a thorough amount of information to be properly prepared. The process is different, but the resources are there and the doctors that I know have been taking it have been passing, so it's working.

COMMITTEE MEMBER GO: Regarding the pass rates, how do you determine the pass/fail rates between physicians and non-physician technologists?

DR. WOOD: They're set to a criterion, not set on a curve. We go through what's called a standard setting procedure with a large group of subject matter experts. Those experts are asked to rate every question as to the percent of individuals who are minimally competent, who would get that item correct. Then all of those items are added together to come up with the standard. So it has nothing to do with the type of individuals that are taking the exam. That is how that standard is set.

MS. MARTIN: Two comments: First, if you're looking for a syllabus that has been prepared, look at that syllabus that's been prepared by the Physician Assistant program. Second, Dr. Wood went over what is different is the fact that we reference the ARRT references the National Council on Radiation Protection and Measurements (NCRP) Report 160, which is the latest national standards for radiation protection and procedure exposures. That was not something that would have been in the former State of California syllabus at all.

SENIOR HEALTH PHYSICIST CANTRELL: One comment, the people that are taking this test have already had this material in school. We're not here to qualify people to take the test. We're here to see if they are qualified to take the test. I think it's good for non-radiology physicians to do research and learn about radiation protection.

CHAIRPERSON TAYLOR: To reiterate with regard to the Radiologic Health Branch fluoroscopy syllabus, we did disseminate a January 30th, 2014 information notice to all the radiologic technology school program directors and the RTCC members. We placed it on our website, which formally abolished the fluoroscopy syllabus. We will not be disseminating it any longer nor speaking to it. It is not to be used to study for the exam.

MS. SLECHTA: I would like to get the pass rate for our fluoroscopy students so we can monitor our progress. I don't have a fluoroscopy program school.

CHAIRPERSON TAYLOR: Perhaps that's something that you and Dr. Wood can have a discussion on offline.

Ms. Slechta and Dr. Wood agreed to the recommendation and the presentation concluded.

Chairperson Taylor then noted there was time to hear the next speaker before the scheduled break. She then introduced the next speaker, Supervising Health Physicist Lisa Russell.

VII. UPDATE: QA / QC REGULATION INSPECTION EXPERIENCES

Lisa Russell

Supervising Health Physicist

X-Ray Inspection, Compliance, and Enforcement Section

Ms. Russell gave a brief overview on her presentation that would cover the law that authorized her agency to set up these regulations, what the regulations require, some inspection experiences, and then the industry response that they had or not had.

- AB 929 (Passed in 2005):
 - Required us to adopt regulations for quality assurance standards.

- Health and Safety Code Section 115061:
 - Requires us to adopt these regulations, and it defines what medical and dental quality assurance is.

- 2011 Timeline
 - After drafting the regulation, a notice of public rule-making was published and sent to all registrants, placed on our website and 2 public comment periods were held, the last one closing in April of 2012.

- New sections were added to Title 17: 30305.1, 30308.1, 30311.1.
 - They addressed medical Quality Assurance (QA) for film facilities only, not digital facilities, because there isn't a standard for digital quality assurance across the board yet.

 - It required QA for the films, the screens, the grids, how they're stored, how they're used, how they're maintained - basic processor testing, and required a technique chart.

 - For dental facilities, it required that the dental facilities have a reference film, and it also established some dose reference levels. This is one of the few areas that we do have dose requirements in our regulations.

- 30305.1 in a nutshell says you have to :
 - Get a copy of your manufacturer recommendations for all of your film and associated equipment, so you can follow those recommendations. And then you have to show that you're following them.

 - Develop a technique chart that has all the required elements.

 - Have your patient size versus your selectable exposure factors, your SID if it's not fixed, grid, data, film screen combination, and patient shielding, if appropriate. All of those have to be on your technique chart.

 - The technique chart does not have to be something posted on the wall. It can be embedded in your machine.

- If all of those components aren't there, you can have an amended technique chart. Something that says "On KUB's, we'll use shielding."
- 30308.1 in a nutshell says:
 - You have to have your processor adjusted to meet your manufacturer specifications for your highest film speed used.
 - You have to do your daily measurements prior to use, base plus fog, mid-density and density difference.
 - You have to assess your fixer retention quarterly, dark room fog semi-annually.
 - You have to evaluate these measurements, fix your problems, and then keep your documentation.
 - For dental facilities, you have to have a reference film and throughout the day, you have to compare the films that are being taken to the reference film and document it.
- Initial Experiences/Industry Response
 - We were met with confusion and denial that these regulations should be in place or were in place. Also, we were met with resistance.
 - For inspections, we're checking to see if you have your regulations and if they're current with these sections in them.
 - For compliance, we're looking at what the manufacturer's recommendations for your film and processor are, and are you complying with them.
 - We're going to look at your technique chart, your documentations of your QC testing for your processor, and then of your quarterly and semi-annually required tests. And we will be looking for the last year's records of those tests. You don't have to keep them longer than that.

- We will look to see if you've had any outlying test results, if you corrected those problems. Then we'll look to see if your correction was effective. Most simply retest. Sometimes it was a problem with what you did in the test.
- For the dental facilities, we'll look for that reference film, documentation of the daily comparison, and documentation of corrective action.

Ms. Russell shared that the RHB website has FAQ's available for those who do not know how to do the QA test. She then shared more resources for dental facilities. She noted that the Chiropractic, Podiatric and Medical Associations don't have anything similar to the Dental Association.

Ms. Russell shared her current experiences:

- Decreased confusion and denial as well as less resistance.
- Willfulness in people not wanting to actually do the testing, or to do any documentation or follow up to show that what they're doing is effective.
- A large number of citations for violations.
- Some people are outsourcing or hiring third parties to come into their facilities and do their testing and a few are converting to digital imaging.

DISCUSSION

COMMITTEE MEMBER GARCIA: Is there anything around the computed tomography area of dental imaging?

SUPERVISING HEALTH PHYSICIST RUSSELL: There's nothing in there specifically related to computed tomography; it's very basic requirements for QA/QC.

COMMITTEE MEMBER TAO: The costs that you quoted, it doesn't sound like much, but it is a significant amount for the average chiropractor. I do hear that this is a significant change in their practice, where some are decommissioning, so to speak, their x-ray machines because of this additional expense.

SUPERVISING HEALTH PHYSICIST RUSSELL: We've had very few that tell us that they're going to remove their machine as part of their corrective action. We

have had some buy used equipment; some of them will share it, if they're relatively close in location.

COMMITTEE MEMBER TAO: Instead of buying the densitometer, some chiropractors are buying 21-step Step wedge. Is that alternative ok?

SUPERVISING HEALTH PHYSICIST RUSSELL: It's not best practice but if they've got a system that is working and they can show us that it's working, we'll accept that.

COMMITTEE MEMBER TAO: Do you have a policy on your citations? Specifically, do you -- you say you cannot process x-rays for 30 days? Is there a fine, after a time line, for example? How do you follow up?

SUPERVISING HEALTH PHYSICIST RUSSELL: We issue the violation and they have 30 days to correct it. If not done yet, we'll give a warning and 15 days. If still not done, they will get a call from a supervisor of the Inspection Section. After that, we'll look at pursuing cease and desist. Until that point, they can continue practicing. The inspectors follow up in person and ask for documentation of the QC.

COMMITTEE MEMBER GO: Due to the rise of portable CT scanners, is there any kind of regulation with regards to portable CT scanners?

SUPERVISING HEALTH PHYSICIST RUSSELL: There are the very basic radiation safety requirements. There are no specific requirements for CT or portable CT.

COMMITTEE MEMBER LIGHTFOOTE: Due to the transition from analog to digital imaging that's occurred in consumer electronics, how long do you anticipate that there will be a need for quality assurance in film processors? Of the licensed x-ray tubes in the State, which ones expose digital receptors and what percentage expose film screen receptors? I think that would be useful information.

SUPERVISING HEALTH PHYSICIST RUSSELL: We don't gather that information. We register the machine and not the image receptor component.

COMMITTEE MEMBER TAO: I suspect chiropractors will have analog x-ray for many, many years to come.

COMMITTEE MEMBER MANSDORF: The California Podiatric Medical Association does have information available, but it's behind a firewall and considered a member benefit for members of the Medical Association.

At this point, Chairperson Taylor allowed questions from the audience due to the availability of time.

MS. KENT: Kyla Kent, Director of a limited x-ray permit school in Oakland California. Regarding QC for bone densitometry machines that's being done, I'm wondering if there is a list of FAQs or citations available from those inspections?

SUPERVISING HEALTH PHYSICIST RUSSELL: We don't have that information.

MS. PERKINS: Nancy Perkins, Program Director, Bakersfield College. Is the State working with any groups to develop standards or regulations on QC for digital? Can Ms. Melissa Martin address the question as an expert?

SUPERVISING HEALTH PHYSICIST RUSSELL: We're hoping for consensus from national organizations like the American College of Radiology (ACR) first, and that way we can have some consistent information to base our regulations on.

MS. MARTIN: The American Association of Physicists in Medicine (AAPM) has recently published recommended national standards for QC for digital radiographic units. The AAPM report will be the document used as the basis for co-developed standards between the ACR and the AAPM.

This concluded the question and answer portion of Supervising Health Physicist Russell's presentation and a 15 minute break was held. Upon returning from the break, Chairperson Taylor introduced the next speaker, Mr. Phillip Scott.

VIII. CONSIDERATION OF ELIMINATING FLUOROSCOPY PERMIT FOR CRT'S
Phillip L. Scott
Senior Health Physicist
Strategic Planning and Quality Assurance Section
Regulations Unit

Senior Health Physicist Scott referred to the October 23, 2013 meeting at which the RTCC recommended that the fluoroscopy permit be eliminated for Certified Radiologic Technologists (CRT's).

Mr. Scott began by proposing a revision to the original Motion based on the verbatim transcript. The original motion made by the RTCC was to remove the requirement for the fluoroscopy permit for CRTs who have completed a Joint Review Committee on Education in Radiologic Technology (JRCERT) certified program and have passed the ARRT exam or the equivalent. The original Motion language was revised to say, "A CRT who meets the following need not obtain a fluoroscopy permit: Has completed a JRCERT accredited program, or an equivalent program, and have passed the ARRT's radiography examination or an equivalent examination".

Chairperson Taylor noted that Mr. Scott's revisions were made in order to give the original motion more technical accuracy from a Radiologic Health Branch (RHB) standpoint. In essence, Mr. Scott did not revise the original motion, he clarified it.

Mr. Scott noted the need for clarity in regulations and began to pose questions for the RTCC to consider regarding the term from the original motion, "equivalent."

- What criteria should be used to determine if a program is JRCERT equivalent?
 - JRCERT states that they are the only agency recognized by the United States Department of Education, and the Council on Higher Education Accreditation for the Accreditation of Traditional and Distance Delivery Educational Programs in these areas. Should this be one of the criteria or not?

- Is Western Association of Schools and Colleges (WASC) an equivalent accreditation program if this is going to be a criterion for determining equivalent programs?

- Consider the ARRT who accepts both WASC and JRCERT candidates.
- JRCERT has about 10 standards with objectives and goals within; what are the extent and the scope of what we evaluate as to what is equivalent?
- What criteria should be used to determine if a certification examination is equivalent to ARRT's radiography exam?
 - There is a law that says what can be done regarding accepting other examinations from other agencies.
 - The law says, "The Department may accept, in lieu of its own exam, a certificate of another agency or organization that certifies radiologic technologists, providing the certificate was issued on the basis of qualifications and an examination deemed by the Department to be reasonably equivalent to the standard established by the Department".
- Are there other certifying organizations in the medical radiography field?
- If a current CRT meets the motion's criteria and does not hold a fluoroscopy permit, is the CRT issued this new inclusive authorization?
- Is there a recentness of education requirement?
- If a CRT does not meet the motion's criteria, but holds a fluoroscopy permit, are they given this new inclusive authorization?
- Is the motion's goal to completely eliminate the fluoroscopy permit for the CRT?
 - If so, is there a transition from the existing CRTs, who did not have a fluoroscopy permit to require them to get a fluoroscopy permit?
 - If so, is there a transition from the existing CRTs to do something to say, "We're going to completely eliminate this fluoroscopy permit once and for all."?
- Do we completely eliminate this or should we continually have this available for out of state people?

Chairperson Taylor then solicited questions from the RTCC members to Mr. Scott.

DISCUSSION

COMMITTEE MEMBER LIGHTFOOTE: The way both the original motion was made and your clarification says it removes the requirement or eliminates the necessity, but does it authorize or permit, because that's a little different. Neither the motion nor the clarification says that it's okay for fluoroscopy to be done by a diagnostic technologist. I think that's actually what this Committee wants to do. We want to say that under certain circumstances, it's okay for a CRT to do fluoroscopy.

SENIOR HEALTH PHYSICIST SCOTT: That brings up a bigger question, because there is an assumption that this assumption was within that motion. However, I don't know if you really meant to say that only under certain specific conditions.

COMMITTEE MEMBER LIGHTFOOTE: The specific conditions would relate to training conditions, not procedures or things like that.

COMMITTEE MEMBER PUCKETT: The current process for a CRT to do fluoroscopy is essentially a two-part process, adequate education and then has to pass the test, that's correct? We need to maintain those two components as separate steps. We could probably establish a time at which JRCERT curricula combined the two, set that as a point in time in the education side, and on the testing side determine what point the ARRT test incorporated adequate fluoroscopy testing.

SENIOR HEALTH PHYSICIST SCOTT: Yes, that's correct. It's in two steps: passing the radiography exam and passing the fluoroscopy exam. What we've adopted in rule-making is that the educational component of JRCERT accredited programs includes enough information, so that it prepares the individual for taking the fluoroscopy examination.

CHAIRPERSON TAYLOR: For clarification, when you mentioned the ARRT exam incorporating fluoroscopy, were you asking about their national examination, was that your point or were you speaking of the exams that they administer on behalf of RHB, which would be radiography and the fluoroscopy

exams? Are you saying what would be the testing component to eliminate the fluoroscopy permit?

COMMITTEE MEMBER PUCKETT: Exactly. I assume if we're talking about eliminating the need for the certificate, we're saying that they're adequately vetted somehow.

CHAIRPERSON TAYLOR: We have a radiography exam and a fluoroscopy exam that ARRT administers on behalf of California and then there's their national exam. That's a third exam. Perhaps the question that Lauren could clarify is if a California candidate takes the ARRT exam for radiography, would that qualify them exam-wise for fluoroscopy, because you're eliminating an exam and a permit?

DR. WOOD: I don't have the content specifications for the radiography exam with me to be able to state how much is tested in the world of fluoroscopy in the radiography examination. It would also take a content expert to look at the content specifications. I just don't have the answer.

SENIOR HEALTH PHYSICIST SCOTT: I need some discussion from the Committee regarding the criteria. Equivalency is something that I have to clarify in regulation...I've got to clarify what the criterion is for that.

- Member Garcia referenced a prior presentation from Mr. Robert McDermott. She believed that after the presentation, the RTCC established that JRCERT programs were sufficient in fluoroscopy.
- Member Lightfoote stated that it seems that there may be no such thing, that we might be talking about a hypothetical magical non-existent phenomenon called JRCERT equivalent. If that be so, we can delete equivalent and move on to question 2.0.

CHAIRPERSON TAYLOR: So where do we go with regard to elimination of the fluoroscopy permit, but not substantiating your competency or proficiency in the educational component with regard to radiography and fluoroscopy, since there are two separate exams currently?

Now, we're talking about potentially having the need to relook at another exam that would include the criteria for those that are going to a JRCERT accredited school that have radiography and fluoroscopy curriculum embedded to make

sure that we have tested them to be able to use both modalities in the field without having that fluoroscopy permit. We do not have a method for testing that now. So we do have to be cognizant of looking at the testing.

MS. MELISSA MARTIN: The Joint Commission requirements that are being developed for accreditation of hospitals, next year in 2015, will incorporate training for use of fluoroscopy for interventional radiology – or interventional fluoroscopy procedures. One item that is being suggested for demonstration of adequate training for fluoroscopy is the passing of the ARRT national exam in fluoroscopy. So I think we may be to a point where you may have to differentiate between interventional and non-interventional fluoroscopy uses.

CHAIRPERSON TAYLOR: My next question is how do I test my competency in that JRCERT accredited radiography program? Is the radiography exam enough to test both educational components in lieu of that second fluoroscopy exam or does that radiography exam cover both educational components that I completed?

COMMITTEE MEMBER LIGHTFOOTE: There's a simple question, does the ARRT national exam have adequate content to confirm that a graduate of a JRCERT program is adequately trained to perform fluoroscopy in the State of California? And that's a question for Ms. Wood to bring the answer to us in October.

MS. LORRAINE HENRY: How about possibly a two-tiered approach? The first tier, a CRT who has met all the requirements without a fluoro and the second tier, a CRT who has met all the requirements with a fluoro exam done at the same time as the ARRT. So there basically would be a new exam.

DR. WOOD: What would need to occur to have a combined examination is something that would need to go before the Board of Trustees for approval. What you would end up having is overlap in content, and you would have clueing from one examination to the other. So you would need to make certain that you had content experts review both of the exams in combination, such that that would not be occurring.

MS. DAWN CHARMAN: I would suggest that a subcommittee of educators be formed to do a content review, because it may very well be that the ARRT is inclusive already within the fluoroscopy exam.

SENIOR HEALTH PHYSICIST SCOTT: What I want to know here is... if you went through a JRCERT accredited program versus a WASC certified or accredited program, is that an equivalent program? What I'm hearing is no. So -- and what's the basic reason, why not?

MS. NANCY PERKINS: Western Association of Schools and Colleges, which recognizes schools in the State of California is not equivalent to the JRCERT process.

SENIOR HEALTH PHYSICIST SCOTT: So here on the third question regarding the criteria of moving forward, and recentness of education. One thing that I do have to do in regulation documentation is show why the time frame that we select has demonstrated that it is the best option out of all the options and alternatives we considered, and why did we reject a reasonable alternative?

COMMITTEE MEMBER PUCKETT: Rather than having a sliding time frame, we could just put a mark in the sand and said anything after this point. And we have the point where we've accepted the JRC curriculum. And so that would be a logical possible point in the sand, where if you graduated after 2012 or -- I think it was 2012, that might be acceptable.

COMMITTEE MEMBER GARCIA: The ARRT has it so that all graduates have to take the exam every ten years, any ARRT administered exam, but I'm not sure if fluoroscopy is included in that.

DR. WOOD: After 2011, anyone having an ARRT certification must requalify within ten years of that certification. As it stands right now, the plan is to have a self-examination that is delivered via Internet delivery. The fluoroscopy examination is a State-based examination, and is not subject to the Continued Qualifications, unless the State would like to do that.

MOTION (PART 1 OF A COMPOUND MOTION)

The committee members approved the vote to accept Regulations Chief Phillip Scott's clarifying language of the RTCC's October 23, 2013 motion along with amendments.

Motion: Committee Member Lightfoote

Second: Committee Member Puckett

Motion passed: Vote 10 Yes, 0 No, 0 Abstain

MOTION (PART 2 OF A COMPOUND MOTION)

The committee members approved the vote to “Establish a subcommittee in concert with AART to confirm the current ARRT exam includes sufficient content regarding fluoroscopy [and to] confirm that people who have successfully passed the exam are qualified to practice fluoroscopy in the state of CA. Further, the subcommittee will identify a date at which this exam [became sufficient for] fluoroscopy...and that any technologist who is certified prior to that date would still require a fluoroscopy permit and have to take the fluoroscopy exam.”

Motion: Committee Member Lightfoote

Second: Committee Member Moldawer

Motion passed: Vote 10 Yes, 0 No, 0 Abstain

Chairperson Taylor asked for someone to volunteer as the subcommittee chair and co-chair. Chairperson Taylor confirmed that Ms. Jennifer Yates would be the chair of the subcommittee and Ms. Dawn Charman would be the co-chair.

Subcommittee volunteers included:

- Dr. Lauren Wood, ARRT
- Ms. Beverly Tupper, ARRT
- Kelly Holt, Orange Coast College
- Nancy Perkins, Bakersfield College
- Dr. Lisa Schmidt, Pima Medical Institute

Chairperson Taylor called for lunch at 11:59 a.m.

IX. LUNCH

Chairperson Taylor called for order at 1:19 p.m. She then introduced the next two speakers, Dr. Chet Reese and Mr. Greg Weaver.

X. RADIATION PROTECTION IN THE CATH LAB: 1950'S TECHNOLOGY JEOPARDIZES TODAY'S MEDICAL PROFESSIONAL

Chet Rees, MD, FSIR, Baylor University
Greg Weaver, CFI Medical

Mr. Weaver began with a disclaimer that the presentation was not advocating for the use of a particular product or procedure and that it would focus on hazardous radiation exposure to health care workers in catheterization labs. Mr. Weaver identified three separate problems:

- Allowable doses for health care workers;
- Technological improvements have resulted in expanded use of fluoroscopy procedures; and
- Monitoring and reporting does not necessarily help attain the lowest achievable radiation doses.

Mr. Weaver shared a direct comparison with different types of radiation dose and noted that the annual acceptable dose for the general public is 1/50th of that for an interventional radiologist.

Mr. Weaver noted the effects of scatter radiation to an interventional radiologist during a typical month of work was equivalent to 60 skull x-rays. He also referenced a paper that concluded that this interventional radiologist could have benefited from better cranial x-ray protection. He then introduced Dr. Chet Rees.

Dr. Rees shared multiple studies noting the impact that low levels of radiation on radiologic technologists is having using the current shielding available (Ceiling shield, lead aprons, lead goggles, etc.) and stated that the standard protection methods are not enough.

Mr. Weaver asked that the Committee and audience ponder why has there been so little improvement workplace safety in the last 30 years. He then shared information on ALARA, or as low as is reasonably possible, and asked if the language from the Nuclear Regulatory Commission (NRC) was a mere suggestion as opposed to a standard?

Mr. Weaver shared 3 calls to action for the Committee:

- We urge you, and through the Department of Public Health, to explore the question does the current implementation of ALARA provide meaningful and sufficient protection for medical professionals, particularly those in the fluoroscopy suites? If the answer is that it does not, we ask the RTCC and through you, the Department, to pursue more appropriate and effective protections for medical professionals, including stronger enforcement by

the State building upon the spirit and improving the current outcomes of ALARA.

- We urge the RTCC, the Department, anyone monitoring this hearing to carry the following message to medical professionals and the societies to which you belong, and the facilities in which you work. Medical professionals in the cath lab are at greater risk for harmful radiation exposure, more so than is commonly understood or admitted to. This exposure is not being mitigated as effectively as is possible, given current available technologies.
- A Radiation Passport: ALARA currently requires facilities to collect data and manage a radiation program on personnel in-house. Physicians may work at multiple facilities in California, most do, and that data is not addressed collectively, but managed by the individual facility. This information we would like to see travel or live with the physician not just the facility.

DISCUSSION

COMMITTEE MEMBER BUTLER: The question though if this is the NRC, it sounds like a federal statute or title. How does that apply to the State level? And is this just informational and what do the Feds actually regulate with this title then?

SENIOR HEALTH PHYSICIST SCOTT: There are a few things at the federal level that each State is subject to. One of those is the Occupational Safety and Health Administration, OSHA, and then you also have U.S. Nuclear Regulatory Commission, or NRC.

We adopt the NRC standards because we have to maintain the agreement State process with them. And so we apply that same occupational and members of the public dose limits to here in California for both x-ray machines and radioactive materials. We do that through adoption by reference of the Title 10 Code of Federal Regulations Part 20. We also work on the international basis too with the International Atomic Energy Agency, IAEA. They are looking at changing the occupational limits and lowering those values. And NRC will also be looking at those values. Barbara Hamrick, our local certified health physicist, could probably tell us more.

MS. BARBARA HAMRICK: It's the International Commission on Radiological Protection (ICRP) recommendations in 107 that would recommend reducing the

annual dose, the lens of the eye dose, and provide some other things. But the NRC has been, for about five years, doing workshops, collecting comments, trying to decide whether or not they want to go down that road. So if you want your voice to really be effective on the dose limit issue, I would go to the NRC's website, find out when they're having another public workshop or comment period, and get your information to them, because that is what would trigger the rest of the states bringing in lower doses.

DR. REES: One of the things I think it may be more of a State level thing, is the woefully inadequate labeling of lead aprons...Is that something that can be addressed at the State level? Because that's a product that's being introduced into the market and the buyer has no idea what they're getting, and can't know unless they submit that apron to testing by their Radiation Safety Officer, which almost nobody does.

MS. BARBARA HAMRICK: That sounds like a consumer protection -- or consumer fraud issue even, if they're mislabeling. So I don't know. I'm sure the State probably has an agency that deals with consumer fraud and so does the federal government.

COMMITTEE MEMBER GO: Do you have examples of evidence-based medicine ... as a health hazard to interventional radiologists as a large cohort? You're just basically presenting case reports, anecdotal information, which are extreme and are terrible.

COMMITTEE MEMBER LIGHTFOOTE: I would actually suggest that this Commission refer this topic -- this entire topic of protection of high frequency operators -- I think you used that phrase high utilization operators that are frequently exposed to relatively high cath lab doses to the University of California.

I'll spearhead the request that the RTCC respectfully requests that the University of California investigate closely opportunities for improving radiation protection and exposure of operators and health professionals during fluoroscopic procedures in the State of California 2014... I'd like the University's report in a year or six months.

MS. BARBARA HAMRICK: I'm going to find out exactly who to direct that request to, because it's not -- it's actually not me, and I can't make a commitment on behalf of the UC Dose Project.

Chairperson Taylor then introduced the next speaker, Professor Anita Slechta, Chairman of the Department of Health Sciences and the director the Bachelor of Science Degree Program in Radiologic Sciences at California State University, Northridge.

XI. AGENDA FOR RTCC SUBCOMMITTEE: SCOPE OF PRACTICE FOR RADIOLOGIC TECHNOLOGISTS
Anita Slechta, MS, BSRT, CRT, FASRT

Ms. Slechta introduced the co-chair and members of the subcommittee and began discussing research on a directive given at the previous RTCC meeting. The RTCC made a recommendation to create a scope of practice for radiologic technologists in California. She then referred to the ASRT practice standards from which she would be presenting and listed six sections.

Ms. Slechta shared the three most relevant sections of the practice standards:

- Clinical Performance Standards. The clinical performance standards define the activities of the individual in the care of patients and delivery of diagnostic or therapeutic procedures.
- Quality Performance Standards. The quality performance standards define the activities of the individual in the technical areas of performance including equipment and material assessment, safety standards and total quality management.
- Professional Performance Standards. The professional performance standards define the activities of the individual in the areas of education, interpersonal relationships, self-assessment and ethical behavior.

Ms. Slechta noted that state statute, regulation or lawful community custom may dictate practice parameters. She also noted that wherever there is a conflict between these standards and state or local statutes or regulations, the state or local statutes or regulations supersede these standards. She then noted some concerns that did not match up with California law:

- Need to define “Licensed Independent Practitioner” because California can't use what the national definition is.
- Need to define what “starting or maintaining IV access” is.
- Need to define “What are medications?”
- A statement on page 9 which says “The technologist is responsible for determining the dose based on the patient's age, weight, and medical condition” won't work in California because the Licentiate is responsible.
- A statement on page 13 that says “injects medication into a PICC line.” The law doesn't speak to it, and there really isn't a problem, but we at least need to be very clear that this is an existing PICC line and not the placement of a PICC line, which is where some people get confused.
- Page 18 shows that the standards require a Radiation safety officer but California does not require an officer, it requires a radiation safety program. A definition is needed.
- A potential conflict on page 21. The Committee identified potential conflict with state laws and regulations in Quality Assurance (QA). California mandated that all procedures be linked as per manufacturer recommendations.

DISCUSSION

COMMITTEE MEMBER BUTLER: Where did these practice standards come from? Who established them? How does that impose a requirement on the State then?

MS SLECHTA: The American Society of Radiologic Technologists. The practice standards in total are reviewed every year on a national basis. Currently, California does not speak to a scope of practice for CRTs. And it was our suggestion... that you actually use the national scope and make it California.

Chairperson Taylor called for a break at 2:53 p.m.

XII. BREAK

Chairperson Taylor called for order at 3:12 p.m. She then introduced the next speaker, Senior Health Physicist Phillip Scott.

**XIII. CONSIDERATION OF RCIS REGULATORY FLUOROSCOPY EXCEPTION
PHILLIP L. SCOTT
SENIOR HEALTH PHYSICIST
STRATEGIC PLANNING AND QUALITY ASSURANCE SECTION
REGULATIONS UNIT**

Mr. Scott began by restating the motion relating to fluoroscopy that was presented at the previous RTCC meeting:

The RTCC recommended the “Development of a limited permit or an exception to existing regulations that would allow an individual, with specific education or experience to be defined, the ability to position the patient or the equipment under the personal immediate supervision of the certified supervisor and operator while x-rays are not being generated.”

Mr. Scott then referred to the Radiologic Technology Act and provided verbiage that showed the intent of the law as well as portions of the Health and Safety Code pertaining to the purpose of the RTCC and administration of x-ray and fluoroscopy.

- HSC Section 114840 (Purpose of the Radiologic Technology Act)

The Legislature finds and declares that the public health interest requires that the people of this state be protected from excessive and improper exposure to ionizing radiation. It is the purpose of this chapter to establish standards of education, training, and experience for persons who use X-rays on human beings and to prescribe means for assuring that these standards are met.

- HSC Section 114855 (Purpose of RTCC)

The department shall appoint a certification committee to assist, advise, and make recommendations for the establishment of regulations necessary to insure the proper administration and enforcement of this chapter, and for those purposes to serve as consultants to the department.

- HSC 106965(a)

Unlawful to administer or use diagnostic or therapeutic X-ray on human beings unless certain criteria are met.

- HSC 106980(a)

Certification in radiologic technology pursuant to 114870(b) or (c) shall not authorize use of diagnostic, mammographic, or therapeutic X-ray equipment except under the supervision of a certified supervisor or operator.

- HSC 107110

Unlawful for any licentiate of the healing arts to administer or use diagnostic, mammographic, or therapeutic X-ray on human beings unless certain criteria are met.

- HSC114850(c)

Radiologic Technology means the application of X-rays on human beings for diagnostic or therapeutic purposes.

Mr. Scott then proceeded to review the regulations that were recently changed and adopted and also noted that the definition to fluoroscopy was changed in Title 17, California Code of Regulations.

- 17 CCR Section 30400(a)(22)

Fluoroscopy: A technique for obtaining, continuously or periodically, a sequence of X-ray patterns and presenting them directly, or through a transfer and optional processing, simultaneously and continuously as visible images.

- 17 CCR Section 30450(a)

“A radiologic technologist fluoroscopy permit issued by the Department shall be required of any radiologic technologist who exposes a patient to x-rays in a fluoroscopy mode, or who does one or more of the following during fluoroscopy of a patient:

Positions the patient, positions the fluoroscopy equipment, or selects exposure factors."

Mr. Scott then posed questions for the Committee to consider such as:

- What kind of specific education are you looking for, such as the content?
- What kind of training needs to be done?
- Is there a length of time that these individuals should be trained or have certain education, number of hours, or number of credits...?
- Is this a self-study area?
- What kind of providers should be doing this?
- Should we allow it at all?
- What is "personal immediate supervision"

Mr. Scott asked the Committee if "the motion would apply in all instances of fluoroscopy... or would it be limited to certain procedures" and if so, why? He then opened the floor to questions from the Committee.

DISCUSSION

COMMITTEE MEMBER LIGHTFOOTE: I think there's been lots of discussion of when does fluoroscopy start? Does fluoroscopy start during the first exposure, and it doesn't cease until the patient leaves the room? By these definitions, fluoroscopy occurs when there are photons being emitted. Are there other interpretations?

SENIOR HEALTH PHYSICIST SCOTT: If "during fluoroscopy" means that radiation is being emitted and the patient is being exposed, then why didn't they just say "exposes a patient to x-rays with a fluoroscopy unit," because that encompasses it the whole time?

I interpret that to be very different than what your interpretation is. I would say that who exposes a patient to x-rays in a fluoroscopy mode, there's no need to say anything else, because any time you expose them to x-ray in a fluoroscopy mode, you're exposing them to x-rays, therefore invoking the RT Act.

COMMITTEE MEMBER ROGERS-NEUFELD: If we go back to the presentation that Lisa Russell made in October, it was clear by definition that the law states the fluoroscopy examination starts with the first initiation of exposure, and then

doesn't cease until the whole examination is over. And so therefore anything that happens in between the positioning of the patient would fall, by law, under the auspices of the RT. I don't think it was the intent of anyone to give the RCIS a permit.

I think rather than trying to get an exemption for different kinds of personnel, I think maybe the definition of fluoroscopy is the problem, and that's what needs to change.

COMMITTEE MEMBER PUCKETT: I actually made the motion on this...it was never my intent to try and create a limited license for RCIS... it's clarification of fluoroscopy. And since I don't believe it's defined in law, it's a regulatory issue, one which can be addressed through regulation.

COMMITTEE MEMBER BUTLER: I think there are two possible answers to the question: An exemption that would allow the S&O to instruct an individual to move the patient or the equipment as needed, as long as the fluoro equipment was not being activated during the course of the procedure. The other way would be just to redefine the definition of fluoroscopy through the Department, in whatever way that would take.

COMMITTEE MEMBER GARCIA: I don't think that a single part of this should be changed. The whole point of licensure and regulations is to verify that the education and training is appropriate to protect the patients of California. I believe that if an RCIS wants to operate fluoroscopy, they should be become an RT first or second.

COMMITTEE MEMBER ORTEGA: I agree with Ms. Garcia. Radiologic technologists, or CRT for California, their education is two years, not just fluoroscopy specific, but radiation safety and the use radiation, which also includes fluoroscopy.

COMMITTEE MEMBER ROGERS-NEUFELD: My comments regarding the issues of changing the definition of fluoroscopy was simply identifying wherein the problem lied. And I never intended, and I don't think any of the physicians intended to grant permits. And we certainly do see that that opens the door for numerous problems.

COMMITTEE MEMBER PUCKETT: We need something practical and something workable, where we can take care of patients. In fact, I would argue that the

physician is the one who's most at risk and is most responsible and is most interested in protecting the patient.

COMMITTEE MEMBER BUTLER: None of us want to take the RT out of the equation. All we're talking about is positioning the patient and the equipment when there's no radiation being generated in the best interests of the patient during a procedure that the S&O is responsible for.

MOTION

The committee members approved the vote to discontinue discussion on changing the definition of fluoroscopy.

Motion: Committee Member Rogers-Neufeld

Second: Committee Member Garcia

Motion passed: Vote 5 Yes, 4 No, 1 Abstain (Dr. Tao)

CHAIRPERSON TAYLOR: The next point would be if you want to rescind the former motion, which means we, as RHB, has no further research on it, you can discuss that.

COMMITTEE MEMBER BUTLER: For the record, I'd like to oppose the motion. It doesn't solve the problem that we have and will have in the future.

COMMITTEE MEMBER PUCKETT: I think from my standpoint, this has to do with the authority and responsibility of the physician, or S&O in this case, to operate this equipment and have the most appropriate person assist and be the third arm in doing the procedure. And I would ask that we not rescind this, and so we at least continue to seek options or ways to solve this problem.

COMMITTEE MEMBER MOLDAWER: I think the elephant in the room is that the standard of care around the country is for surgical technologists – surgical technicians to assist the surgeon. And it presented not only no health risks to the populations of these other states, but, in fact, was the standard of care in all of these other locations where I've practiced.

MOTION

The committee members did not pass the vote to rescind the October 23, 2013 motion regarding fluoroscopy scope of work.

Motion: Committee Member Garcia

Second: Committee Member Ortega

Motion not passed: Vote 5 Yes, 5 No, 0 Abstain

MS. PRZEPIORSKI: This is Diane Przepiorski with the California Orthopaedic Association. I do think that the Committee has identified a problem and might respectfully request that a task force be formed to maybe be a little more thoughtful about the recommendation that might come before the Committee.

CHAIRPERSON TAYLOR: Members, what are your thoughts with regard to path forward, Phillip's job as it currently exists, which doesn't appear to be clear or making Phillip's job more defined by perhaps offering some alternatives to path forward.

COMMITTEE MEMBER GARCIA: It's either Title 22 or Title 24 that states it's 70255(b) and (c) that sufficient certified radiologic technologists shall be employed to meet the needs of the service being offered and (c) is there shall be at least one person on duty or on call at all times capable of operating radiological equipment and this has to do with radiologic service staff.

COMMITTEE MEMBER GO: So who else are we trying to say, okay, we want these people to be able to move patients and operate equipment? I don't know.

COMMITTEE MEMBER MANSDORF: The point of the original motion was never to have anybody else actuate ionizing radiation. It was strictly a practicality issue to have somebody assist the surgeon for the benefit of the patient. What the issue here seems to be is the definition of fluoroscopy and when it's applied or the terms for it. I'd entertain the motion, if we would be willing to revisit the definition of fluoroscopy.

MOTION

The committee members approved the vote to have the RTCC investigate changing the definition of fluoroscopy, specifically as it pertains to intraoperative fluoroscopy as it pertains to positioning the patient and motion of the x-ray unit, including for the operative suite and the Cardiac Cath Lab.

Motion: Dr. Mansdorf
Second: Dr. Moldawer

Motion passed: Vote 6 Yes, 4 No, 0 Abstain

Mr. Scott stated that both motions were very similar and that he could probably combiner them in the in the evaluation and in the investigation being requested.

COMMITTEE MEMBER MOLDAWER: I think for the purposes of the investigation, coming up with a potentially different definition of fluoroscopy for the cardiac cath and intraoperative environment could certainly then be applied if the Committee recommends it be applied to the radiology suite, to the invasive cath lab and so forth.

[Bring back] options that apply to the cath lab and to the intraoperative environment, and then we can decide whether or not it makes sense, based upon the decision of the Committee to approve or recommend approval of those small changes in a more broad environment.

XIV. PUBLIC COMMENT

MS. CHARMAN: I recently got the results of the fluoroscopy exam from the state, but is it to separate them either in an academic year or fiscal year period, because when you measure someone from January to December, it incorporates two different classes of students.

CHAIRPERSON TAYLOR: I think we addressed that, meaning that there are a lot of schools and everybody has a different sliding rule. Everybody has a different need that we can't accommodate.

DR. ALIPOON: To most rad techs, “positioning the patient” does not mean moving them, because... you should be able to do CPR. In our mind, it means positioning the patient for the purposes of obtaining an x-ray image.

MS. SLECHTA: The California Society of Radiologic Technologists wrote a letter in opposition of RCIS doing radiography or fluoroscopy without appropriate education. And now you've expanded it to anybody who's in that room, who is convenient, and scrubbed in for whatever reason. I would ask you to consider that you have other regulations that are going to prohibit some things that California law dictates, and you have a whole group of people who still are concerned about dose, not business, not the bottom line, dose.

MS. PERKINS: I think it's really important that we only have licensed individuals available in the room to do those studies. And I would certainly back the California Society of Radiologic Technologists in that approach, and understand that our patients deserve the least dose at all times.

Chairperson Taylor thanked everyone who assisted with, attended, and participated in the meeting. She then acknowledged that the CDPH will continue to partner with the regulated community in an effort to better serve the citizens of California, stakeholders, and the Committee members.

Chairperson Taylor provided information about the next RTCC meeting:

October 29, 2014
1500 Capitol Avenue
Sacramento, CA 95814

Chairperson Taylor adjourned the meeting at 4:56 p.m.