MARYLAND BOARD OF PHYSICIANS
CARDIOVASCULAR INVASIVE SPECIALISTS (CIS) WORKGROUP
OPEN MEETING MINUTES
June 18, 2018

MEMBERS PRESENT: Dr. Martin Albornoz, Dr. Anthony Chiaramonte, William Fisher, Dr. Harry C. Knipp, Dr. Mahadevappa Mahesh, Dr. Joseph Marine, Sandra E. Moore, Andrew Nicklas, Lisa Pervola, Ellen Douglas Smith, and Jennifer Witten.

MEMBERS ABSENT: Amy Dukovic and Dr. Daniel Durand.

STAFF PRESENT: Stacey Darin, Assistant Attorney General; Wynee Hawk, Manager, Policy and Legislation; Yemisi Koya, Director, Communication, Education and Policy Unit and CIS Workgroup Facilitator; Sandi Van Horn, Health Policy Analyst; and Mark Woodard, Health Policy Analyst.

GUESTS: Kasia Foster, Valerie Fowler, Peggy McElgunn, Zach McElgunn, Elaine Michewicz, Martha Nathanson, Adam Pijanowski, Vanessa Purnell, Melia Ritchie, Lindsay Rowe, Kelly Scible, and Danielle Vranian.

CALL TO ORDER / INTRODUCTIONS
Dr. Koya, the workgroup facilitator, called the meeting to order at 1:02 p.m. and provided background. There were two bills (cross files) regarding CIS licensure introduced during the 2018 Maryland General Assembly session. The bills did not pass, and the parties agreed to work on the matter in the interim. In March 2018, the Board sent a letter to the chairs of the Senate Education, Health, and Environmental Affairs Committee and the House Health and Government Operations Committee offering to establish a workgroup to conduct an evaluation of CIS for potential licensure.

This workgroup consists of 14 members. However, the Board is searching for a replacement of one member who notified the Board that she could not be available for the workgroup.

Workgroup members and staff introduced themselves.

ADMINISTRATIVE MATTERS AND WORKGROUP OBJECTIVES
Dr. Koya reviewed the workgroup objectives outlined in the March 2018 letter to the legislative committee chairs.

Ms. Darin explained that the workgroup is being facilitated under the Open Meetings Act so that interested stakeholders can be part of the process. Ms. Darin noted that eight members are needed for a quorum. Agendas will be posted on the Board’s Website and meeting minutes will be kept. Stakeholders may submit written comments.

Dr. Koya reviewed “ground rules” for the preparation of and facilitation of the meetings. The overarching goal of the workgroup is to ensure that the members conclude their work and submit a report to the Maryland legislature by October 31, 2018.
Dr. Koya announced a break at 1:22 p.m. Upon reconvening at approximately 1:30 p.m., Dr. Koya asked for a motion for the workgroup members to adopt the ground rules. Ms. Moore moved the motion, and Dr. Knipp seconded. All members present voted in favor.

Dr. Koya reviewed the planned meeting dates and the deadlines for workgroup members to submit meeting materials.

**CRITERIA FOR EVALUATING PROPOSED LICENSURE OF ALLIED HEALTH PROFESSIONS**
Ms. Hawk reviewed six criteria that other states have used as a framework for evaluating the necessity of licensing a new profession: Risk of the unregulated practice harming the consumer; requirements for specialized skills or training; the extent of autonomous practice; the scope of practice and if it overlaps with other professions; economic costs to regulate the group; and alternatives to regulation.¹ If the workgroup determines that regulation is needed, the workgroup will consider the type of regulation that would be consistent with public protection.

Dr. Marine joined the meeting at approximately 1:40 p.m. and introduced himself.

**BACKGROUND INFORMATION / COMPARISON OF STATES / EDUCATION**
Mr. Woodard presented on his research regarding the regulation of CIS in South Carolina and Washington state and summarized key provisions of those states’ laws. Mr. Woodard also presented on the Commission on Accreditation of Allied Health Education Programs’ standards and guidelines for the accreditation of educational programs in cardiovascular technology; Cardiovascular Credentialing International (CCI); and selected advertisements for employment opportunities for registered CIS (RCIS).

In response to a question from Dr. Knipp, Mr. Fisher said that there are 145 RCIS in Maryland. Mr. Nicklas noted that if CIS were to be licensed in Maryland, the intent is not to prohibit other professionals that are capable of assisting in cardiovascular technologies.

Ms. Witten inquired about the terms “registered,” “certified,” and “licensed.” Mr. Woodard commented that he found “registered” CIS to be the term mainly in use. Ms. Darin noted that currently there is only a “licensure” category in Maryland.

Dr. Albornoz spoke about facilities that can perform interventional procedures, requiring 24-hour coverage, and the increasing need for available teams.

In response to a question from Dr. Mahesh, Mr. Woodard and Ms. Darin commented on CIS and fluoroscopy in South Carolina and Washington.

¹ The Board modeled this criteria based on the work of Virginia.
Mr. Nicklas noted that, according to CCI, there are seven states that have some form of regulation addressing CIS. In other states, it’s a hospital-by-hospital policy. The seven states are Arkansas, Delaware, Indiana, Ohio, South Carolina, Texas, and Washington.

Dr. Marine brought up the concept of defining what it means to operate fluoroscopy. Dr. Mahesh brought up supervision. Ms. Moore agreed to begin a framework for a definition of operating fluoroscopy. There was discussion about equipment operation and various tasks in a fluoroscopy procedure; types of practice settings; the RCIS credential; the role of rad techs in a cath lab; rad tech training and advanced credentialing; and the cath lab atmosphere. Mr. Fisher agreed to gather information for the group to compare the educational background and training of rad techs and RCIS.

Mr. Nicklas spoke about shortages of rad techs in cath labs. Ms. Pervola added that there are shortages of other techs, such as MRI and cat scan techs, as stand-alone imaging centers have taken rad techs from hospitals.

Dr. Mahesh agreed to gather information on the training in safety standards needed for an individual in Maryland to perform fluoroscopy.

Dr. Koya announced a five-minute break at approximately 2:25 p.m.

Dr. Chiaramonte inquired about the intent of the 2018 legislation regarding other tasks that a CIS would be permitted to perform (such as taking a patient history). Mr. Nicklas responded that there is a scope of practice that can be distributed at the next meeting, along with educational components.

**ITEMS SUBMITTED BY WORKGROUP MEMBERS**

Dr. Knipp presented on two journal articles regarding radiation effects and skin reactions.\(^2\) He commented that there is a significant dose of radiation with fluoroscopy and side effects are delayed, so fluoroscopy is not a skill to be taken lightly.

There was discussion about fluoroscopy training and managing radiation doses. Ms. Pervola pointed out the need for understanding the different fluoroscopy doses for adults and children.

Dr. Marine discussed the responsibility of the cardiologist in the cath lab and asked for clarification on how often patient reactions are occurring on newer equipment versus older machines. Dr. Mahesh agreed that modern technology is better than the older equipment, but it’s difficult to say how many injuries are occurring nationwide. Ms. Moore discussed the role of the cardiologist and the radiographer.

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\(^2\) One article, dated February 2010, was titled, “Fluoroscopically Guided Interventional Procedures: A Review of Radiation Effects on Patients’ Skin and Hair.” This article, authored by Stephen Balter, PHD, et al, appeared in *Radiology*, Volume 254, Number 2. The second article, dated April 2014, was titled, “Patient Skin Reactions From Interventional Fluoroscopy Procedures.” This article, authored by Stephen Balter and Donald L. Miller, is identified as a “web exclusive article,” copyright American Roentgen Ray Society (AJR:202). The articles were brought to the attention of the workgroup for educational purposes to initiate discussion.
Dr. Mahesh stated that he would provide an article regarding NCRP (Report No.) 168 for the next meeting.³

Ms. Darin discussed liability. In the Maryland rad tech statute, there are disciplinary grounds and rad techs are individually liable for their actions. One matter for the workgroup to consider is whether an RCIS should be individually liable for their actions, which would be a reason in favor of licensure, or whether the liability should be on the cardiologist. If there is an exception to licensure, the Board would have no oversight if there is an issue with the care provided by the RCIS.

DISCUSSION

Regarding additional training for CIS, Ms. Pervola and Mr. Fisher discussed the Maryland Higher Education Commission (MHEC) and program credit requirements. Ms. Darin inquired about an additional level of training specifically in fluoroscopy for RCIS beyond their graduation/certification, similar to an add-on track (if there were an exception to licensure). Ms. Moore noted that there would need to be changes to current programs and Maryland law for a CIS to be qualified to perform fluoroscopy. Dr. Knipp mentioned, as a possible precedent, that there is an additional level of training for nuclear medicine technologists to operate cat scans.

Dr. Koya introduced Peggy McElgunn, Executive Director of the Alliance of Cardiovascular Professionals, who will be presenting at the July meeting. Dr. Koya suggested topics for the workgroup’s focus at the next meeting. She also noted that a fiscal note regarding the cost of CIS licensure would be drafted. There was discussion about the cost of licensure for a small group of practitioners to be licensed under a new Board program versus the cost of joining an existing program with a higher number of practitioners.

ADJOURNMENT
Dr. Koya adjourned the meeting at 3:10 p.m.

Respectfully Submitted by,

[Signature]

Dr. Yemisi Koya
Director, Communication, Education and Policy Unit

³ "NCRP" is the National Council on Radiation Protection and Measurements.
MARYLAND BOARD OF PHYSICIANS
CARDIOVASCULAR INVASIVE SPECIALISTS (CIS) WORKGROUP
OPEN MEETING MINUTES
July 23, 2018

MEMBERS PRESENT: Dr. Martin Albornoz, Dr. Anthony Chiaramonte, Dr. Daniel Durand, William Fisher, Dr. Mahadevappa Mahesh, Dr. Joseph Marine, Sandra E. Moore, Andrew Nicklas, Ellen Douglas Smith, and Danielle Vranian

MEMBERS ABSENT: Dr. Harry C. Knipp

STAFF PRESENT: Stacey Darin, Assistant Attorney General; Yemisi Koya, Director, Communication, Education and Policy Unit and CIS Workgroup Facilitator; Sandi Van Horn, Health Policy Analyst; and Mark Woodard, Health Policy Analyst

GUESTS: Delegate Bonnie Cullison, Kim Davidson, Valerie Fowler, Noa McElgunn, Peggy McElgunn, Zach McElgunn, Elaine Michewicz, Vanessa Purnell, Lindsay Rowe, Kelly Scible, and Jonathan Sibley

CALL TO ORDER / INTRODUCTIONS
Dr. Koya, the workgroup facilitator, called the meeting to order at 1:05 p.m. and noted that Maryland Delegate Bonnie Cullison was in attendance. Delegate Cullison thanked the group for their work.1 Ms. Vranian and Dr. Durand, first-time attendees, introduced themselves. Dr. Knipp announced himself by phone.

APPROVAL OF MEETING MINUTES
Mr. Nicklas made a motion to approve the minutes of the June 2018 CIS Workgroup meeting, and Mr. Fisher seconded. Ms. Moore suggested a correction. The minutes were approved with the correction.

COSTS/FISCAL INFORMATION
Dr. Koya reviewed preliminary fiscal information prepared by Board staff. She reported that, if RCIS were to be licensed in Maryland (as a separate group), licensure activities to be performed by Board staff would increase operations costs for the Board, resulting in an estimated application fee of approximately $380 per RCIS.2

Dr. Koya and Ms. Darin responded to follow-up questions from workgroup members and Delegate Cullison.

Dr. Marine joined the meeting at approximately 1:24 p.m.

1 Delegate Cullison was a sponsor of one of the two bills (cross files) regarding CIS licensure introduced during the 2018 Maryland General Assembly session.
2 The estimate is based on 145 RCIS in Maryland – a number discussed at the first workgroup meeting on June 18, 2018. The estimate does not include costs of Board compliance activities.
ALLIANCE OF CARIOVASCULAR PROFESSIONALS
Dr. Koya introduced Peggy McElgunn, Executive Director of the Alliance of Cardiovascular Professionals, who provided an overview of her organization and its membership. She discussed the team approach to healthcare, the “triple aim” concept (to increase access to healthcare, to improve quality, and to provide value and reduce costs for patients), RCIS training and credentials, and the role of the physician in the cath lab.

Workgroup members commented on or had questions about topics in the presentation. There was additional discussion about RCIS educational curriculum and training. Ms. Darin provided some clarification regarding several topics, including liability for Maryland licensees, variation of fluoroscopy duties by RCIS in certain states, unlicensed practice in Maryland, and x-ray duties addressed in §14-306 of the Health Occupations (H.O.) Article.

Workgroup members also discussed fluoroscopy technology, radiation safety, the role of RTs, the market for RCIS professionals, workplace shortages, and physician supervision.

Ms. Smith joined the meeting at approximately 2:20 p.m.

Ms. Darin raised questions about terminology (performing fluoroscopy and assisting with a procedure) and how RCIS would fit into Maryland’s statute.

Ms. McElgunn stated that clarification is being sought from Maryland to accept that RCIS “assist” (take direction from the cardiologist) during fluoroscopy.

Dr. Albornoz noted certain tasks in fluoroscopy that an RCIS cannot do. Dr. Koya asked Dr. Albornoz to outline the duties of RCIS.

Dr. Koya announced a break at 2:32 p.m. The workgroup reconvened at 2:46 p.m. Ms. McElgunn concluded her presentation by reminding workgroup members of the “triple aim” and encouraging workgroup members to amend or interpret current regulations to include the team approach in the cath lab instead of moving toward licensure.

CONTINUED RESEARCH ON OTHER STATES
Mr. Woodard presented additional research regarding the regulation of CIS in other states.

EDUCATIONAL BACKGROUND AND TRAINING OF RAD TECHS AND RCIS
Mr. Fisher discussed the similarities of and differences between the cardiovascular technology and rad tech programs at Howard Community College. Mr. Fisher responded to questions about program options and hands-on training.

RCIS SCOPE OF PRACTICE
Mr. Nicklas presented on the RCIS scope of practice, as prepared by the Alliance of Cardiovascular Professionals.
EDUCATION / CREDENTIALING EXAMINATION / DEFINITION OF TERMS
Ms. Moore distributed items regarding examinations from the American Registry of Radiologic Technologists. Accredited radiography programs are required to have a certain curriculum with academic and clinical training. She presented a comparison of training hours for radiography programs offered in Maryland. She also discussed C-arm units, scatter radiation, and suggested definitions related to fluoroscopy.

Mr. Nicklas read the definition of “practice radiography” in Maryland statute. He suggested that the definition be altered for RCIS, under supervision of a cardiologist, with the setting limited to a cardiac cath lab.

There was discussion about discrepancies between terminology or tasks in the ARRT materials and the scope of practice for rad techs in Maryland.

Ms. Vranian pointed out that the definition in statute is related to licensure requirements and that licensed rad techs also are subject to Maryland regulations.

In response to a question about continuing education for RCIS, Mr. Fisher noted that RCIS are required to complete 36 CE credits every three years.

Dr. Koya permitted Ms. Scible, a guest from Howard Community College, to respond to a question about instruction in patient safety. Ms. Scible estimated that 70% of her course is on patient or staff safety.

Dr. Koya asked workgroup members to review the definition of “fluoroscopy” offered by Ms. Moore and Dr. Mahesh. She also requested that Dr. Mahesh and Dr. Marine work on the meanings of “assist” and “perform” and determine the steps in a fluoroscopic procedure (by all personnel in the team) from the time the patient enters through the time the patient exits.

Ms. Darin suggested that it would be helpful if the workgroup determined the meaning of the term “x-ray duties,” which is utilized in §14-306 of the H.O. Article. Another option, if a change to law is not recommended, may be to request clarification from the Board on which parts of the fluoroscopy procedure are considered “x-ray duties.”

NCRP 168 ARTICLE
Dr. Mahesh presented on his article, titled “NCRP 168: Its Significance to Fluoroscopically Guided Interventional Procedures.” There was discussion about radiation injuries to patients.

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3 See the definition of “Practice Radiography” under H.O. Article, §14-5B-01.
4 H.O. Article, §14-306 is titled “Duties delegated by a licensed physician.”
5 The article, written by Dr. Mahesh, is ©2013 American College of Radiology.
AMERICAN SOCIETY OF RADIOLOGIC TECHNOLOGISTS (ASRT) LETTER
Dr. Durand sought clarification about the reference to the Cardiovascular Credentialing International certification in the second paragraph of the letter. Ms. Moore will follow up with ASRT.

DISCUSSION
Dr. Koya asked the workgroup if any members wanted to keep licensure of RCIS in consideration. At least three members expressed support for keeping possible licensure as an option; therefore, there was no unanimous decision to exclude possible licensure at this time.

Dr. Koya opened discussion regarding standardized objective criteria presented at the June meeting.

Regarding criteria #2 (specialized skill and training required), workgroup members commented on the clinical aspect of training, safety features of fluoroscopic machines, and scatter radiation. Dr. Koya assigned some additional tasks for the next meeting. Ms. McElgunn agreed to survey her organization’s membership about the badge readings of RCIS in other states. Ms. Moore agreed to research the number of clinical hours of training rad techs receive in Maryland programs. Mr. Fisher said he could find the (national) requirements for hours of training for an accredited program for RCIS. Mr. Fisher also agreed to locate feedback from students who graduated and are employed as RCIS about their preparation for the workforce. Further discussion about criteria #2 was tabled.

Workgroup members discussed criteria #3 (extent of autonomous practice) and the common practice of an RCIS working at the direction of the physician. Discussion regarding criteria #4 (scope of practice) and criteria #5 (economic costs) followed. Mr. Nicklas volunteered to obtain information on the costs to hospitals (such as overtime and loss of staff) in the current environment.

ADJOURNMENT
Dr. Koya adjourned the meeting at 4:36 p.m.

Respectfully Submitted by,

[Signature]

Dr. Yemisi Koya
Director, Communication, Education and Policy Unit
MARYLAND BOARD OF PHYSICIANS
CARDIOVASCULAR INVASIVE SPECIALISTS (CIS) WORKGROUP
OPEN MEETING MINUTES
August 20, 2018

MEMBERS PRESENT: Dr. Martin Albornoz, Dr. Anthony Chiaramonte, Amy Dukovic, William Fisher, Sandra E. Moore, Andrew Nicklas, Lisa Pervola, Ellen Douglas Smith, and Danielle Vranian

MEMBERS PRESENT BY PHONE: Dr. Harry C. Knipp and Dr. Joseph Marine

MEMBERS ABSENT: Dr. Daniel Durand, Dr. Mahadevappa Mahesh, and Jennifer Witten

STAFF PRESENT: Stacey Darin, Assistant Attorney General; Yemisi Koya, Director, Communication, Education and Policy Unit and CIS Workgroup Facilitator; and Sandi Van Horn, Health Policy Analyst

GUESTS: Kim Davidson, Valerie Fowler, Peggy McElgynn, Zach McElgynn, Lindsay Rowe, Kelly Scible, and Jonathan Sibley

CALL TO ORDER / ANNOUNCEMENTS / FISCAL UPDATE
Dr. Koya, the workgroup facilitator, called the meeting to order at 1:02 p.m. Ms. Dukovic, attending for the first time, introduced herself. Dr. Koya made announcements about (1) workgroup member and audience conduct; and (2) expectations for today’s meeting. She also provided an update to her July presentation of the Board’s fiscal analysis regarding potential CIS licensure. She reported that the estimated fee would be more than $500 per CIS (for two years), if the total number of CIS who would apply for initial licensure in Maryland was 100 instead of 145. The Board is contemplating keeping the licensure fee at an estimated $380 (the amount discussed at the July meeting), and there likely would be a fee of possibly $130 for a physician agreement similar to those of licensed physician assistants (delegation agreements) and athletic trainers (evaluation and treatment protocols).

APPROVAL OF MEETING MINUTES
Dr. Albornoz made a motion to approve the minutes of the July 2018 CIS Workgroup meeting, and Ms. Moore seconded. There was no opposition to the motion; therefore, the minutes were approved.

PRESENTATION FOLLOWUP
Peggy McElgynn, Executive Director of the Alliance of Cardiovascular Professionals, reported that the survey (discussed at the July meeting) was not yet completed. She will present at the next meeting in September.

UPDATE: AMERICAN SOCIETY OF RADIOLOGIC TECHNOLOGISTS (ASRT)
Ms. Moore reported on a letter, dated July 31, 2018, from the ASRT to the Board, indicating the radiographer credentials (primary and post-primary certifications) that the ASRT deems appropriate for work in the catheterization lab. Ms. Moore stated that the ASRT is not advocating for RCIS as a stand-alone position.

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1 Dr. Marine called in while traveling to the meeting and arrived at approximately 1:45 p.m.
2 The lower number accounts for RCIS who may not qualify for licensure in Maryland or who may leave Maryland.
3 A full fiscal analysis by the Board has not been completed.
4 At the July meeting, Dr. Durand sought clarification regarding ASRT’s first letter, dated June 27, 2018, to the Board.
DUTIES OF RCIS IN MARYLAND

Dr. Albornozi presented a scope of practice that he drafted to describe “reasonable” duties for RCIS in Maryland in an invasive cardiac cath/electrophysiology lab. There was discussion about supervision by a physician and items listed as possible “X-ray duties.” Dr. Koya granted a request by Mr. Fisher for Ms. Scible (cardiovascular technology program faculty) to address the workgroup about CIS coursework and hands-on training offered by Howard Community College (HCC). Mr. Fisher noted that Maryland students obtain clinical experience (under supervision) beyond the 45 hours of classroom time. Ms. Scible commented about the limitations on training due to Maryland’s current law.

Dr. Koya asked workgroup members if there was consensus that the items listed as “clinical” duties on the suggested scope of practice were not X-ray duties. Workgroup members agreed and then considered the first item in the next section of “possible” X-ray duties (placing the patient on the X-ray table and positioning the patient in collaboration with nursing/anesthesia). Workgroup members discussed the team assisting the patient and a guide on the table for patient placement. Workgroup members reached consensus on moving the item about patient placement to the list of “clinical” duties.

Dr. Koya brought up the next task in the section of “possible” X-ray duties: turning the X-ray equipment on and off. Dr. Chiaramonte suggested that this item and the remaining items in that section are “X-ray duties.” Dr. Knipp “seconded” the comment. Dr. Koya clarified with Dr. Chiaramonte that he was making a motion and that Dr. Knipp had seconded. In response to a question, Ms. Darin explained the options regarding licensure or an exception to licensure in statute if the workgroup determines that the rest of the listed items are “X-ray duties.” The workgroup also could consider defining “X-ray duties” in statute.

Dr. Albornozi commented on his experience as an interventional cardiologist and opined that RTs and RCIS in the catheterization lab are interchangeable. A discussion about liability and legal issues began. In response to a question, Dr. Albornozi stated that in most cases in the catheterization lab the physician is stepping on the pedal but it helps to have flexibility in certain situations. Dr. Marine commented that all personnel in the catheterization lab are under the direction of the cardiologist. Ms. Darin reminded the workgroup that “independence” of the practitioner is one of the considerations for licensure.

Ms. Moore provided a document describing the duties of the cardiovascular radiographer and inquired about emergencies (such as repairing an artery) that could occur in the catheterization lab, requiring other types of (non-cardiac) imaging by a radiographer.

Dr. Koya returned to Dr. Chiaramonte’s motion; however, no further action was taken.

STEPS IN A FLUOROSCOPIC PROCEDURE

Dr. Marine presented a draft of information about “performing fluoroscopy,” including a proposed definition. Workgroup members had no comments.

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5 Mr. Nicklas arrived during this discussion.
6 “X-ray duties” is a term in Health Occupations Article, §14-306, Annotated Code of Maryland, which has been discussed at prior meetings.
CLINICAL HOURS IN MARYLAND RAD TECH EDUCATIONAL PROGRAMS
Ms. Moore directed workgroup members to the ASRT letter (already discussed), a letter from the Maryland Society of Radiologic Technologists, and a statement from a Maryland radiologist assistant. She also presented on Maryland radiography program clinical hours. Ms. Moore and Mr. Fisher discussed the Joint Review Committee on Education in Cardiovascular Technology (JRC-CVT), plus standards regarding training program hours and competency. Mr. Fisher spoke about a JRC-CVT survey of accredited programs and information that was provided in a letter from the JRC-CVT.

Dr. Koya asked workgroup members to think about standardized objective criteria item 2 (specialized skill and training) and then called for a five-minute break at approximately 2:15 p.m. Upon reconvening, Ms. Darin reported that during the break there was a question about the Board’s rad tech committee, which is an advisory group to the Board. There will be a Board meeting (open to the public) at which representatives of the rad tech committee and the CIS Workgroup can present opinions or recommendations, which the Board will evaluate for its decision to be in the report due to legislators. Dr. Koya will communicate with workgroup members about meeting logistics.

Ms. Pervola opened discussion on a scenario involving certain individuals, such as a nurse or ultrasound tech, who could sit for the RCIS credentialing exam without having didactic training on radiation safety or by graduating from a non-accredited program. Workgroup members reviewed a letter from Cardiovascular Credentialing International (CCI) distributed during the break.

Dr. Koya noted that the workgroup had consensus that RCIS in Maryland only would work in the catheterization lab, so the question is whether RCIS need the same expansive educational background that rad techs possess. There was continued discussion on accredited education; the credentialing exam; “performing” or “assisting with” fluoroscopy; physician delegation, possibly to a nurse, to step on the pedal in an emergency situation; competency in comparison to hours of training; and additional fluoroscopy training for RCIS. Ms. Darin said she could look into the Maryland Board of Nursing statute. Ms. Pervola mentioned California’s requirements; she will provide information for the next meeting.

There also was discussion about acceptable requirements for possible RCIS licensure or an exception in Maryland. Ms. Darin reviewed Health Occupations (H.O.) Article, §14-306, Annotated Code of Maryland in reference to physician assistants, who are permitted to perform certain nonfluoroscopic X-ray procedures after meeting specific requirements. Workgroup members further discussed the advantages and disadvantages of licensure for RCIS in Maryland.

There was a second break at approximately 3:45 p.m. The workgroup reconvened at approximately 3:55 p.m. Ms. McElgunn provided additional information regarding California’s exemption letter.⁷

Workgroup members and Ms. Scoble commented on the possible impacts of licensure of RCIS in Maryland and liability issues for hospitals, physicians, and other licensees in the catheterization lab. Ms. Dukovic spoke about the team approach, plus risks to patients if catheterization labs are not fully staffed.

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⁷ Ms. McElgunn will provide the letter for the next meeting.
During this discussion, Dr. Chiaramonte several times questioned the opposition to licensure.

At approximately 4:30 p.m., Dr. Koya assigned workgroup members to three smaller groups to discuss whether or not they wanted licensure. Dr. Albornoz, Mr. Fisher, and Mr. Nicklas reported back to the full workgroup, but there still was no consensus reached on licensure. Mr. Fisher noted that he was not sure how RCIS licensure or an exemption in Maryland would impact his enrollment at HCC. Mr. Nicklas further commented that solving the workforce issue should be the primary goal. Dr. Koya and Ms. Darin mentioned other issues for consideration, such as the reason for the legislature’s inclusion of fluoroscopy X-ray duties under H.O. Article, §14-306, out of concerns for patient safety.8

Dr. Chiaramonte commented that he would be willing to give a bit on the fluoroscopy issue if, for example, the RCIS in the catheterization lab had appropriate training. However, he was concerned, as are others, that an exception to licensure could lead to other groups seeking exemptions. Dr. Albornoz commented on the regulatory environment of Maryland and the perspective of the legislature. Dr. Koya stated that she was not calling for a vote on licensure at this time. She returned to the remaining agenda items.

NATIONAL STANDARDS FOR TRAINING HOURS IN ACCREDITED PROGRAMS
Mr. Fisher agreed that his earlier comments regarding national standards were sufficient regarding this agenda item.

FEEDBACK FROM STUDENTS
Mr. Fisher reported that he did not find data or specific comments about readiness for employment in a catheterization lab.

FINANCIAL IMPACT TO HOSPITALS
Mr. Nicklas reported on issues related to hospitals using staffing agencies. Due to a shortage of rad techs, hospitals in Maryland turn to staffing agencies and incur higher costs to staff cardiac catheterization labs.

ADJOURNMENT
Dr. Koya adjourned the meeting at 5:02 p.m.

Respectfully Submitted by,

[Signature]

Dr. Yemisi Koya
Director, Communication, Education and Policy Unit

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8 In Maryland, under H.O. Article, §14-306(e), only a licensed individual may perform X-ray duties involving fluoroscopy.
MOUNTAIN BOARD OF PHYSICIANS
CARDIOVASCULAR INVASIVE SPECIALISTS (CIS) WORKGROUP
OPEN MEETING MINUTES
September 24, 2018

MEMBERS PRESENT: Dr. Martin Albornoz, Dr. Anthony Chiaramonte, Amy Dukovcic, Dr. Daniel Durand, Sandra E. Moore, Andrew Nicklas, Lisa Pervola, Danielle Vranian, and Jennifer Witten

MEMBERS PRESENT BY PHONE: Dr. Harry C. Knipp and Dr. Joseph Marine

MEMBERS ABSENT: William Fisher, Dr. Mahadevappa Mahesh, and Ellen Douglas Smith

STAFF PRESENT: Stacey Darin, Assistant Attorney General; Yemisi Koya, Director, Communication, Education and Policy Unit and CIS Workgroup Facilitator; Sandi Van Horn, Health Policy Analyst; and Mark Woodard, Health Policy Analyst

GUESTS: Delegate Bonnie Cullison, Herman Dawson, Valerie Fowler, Vanessa Purnell, Lindsay Rowe, Kelly Scible, and Jonathan Sibley

CALL TO ORDER / ANNOUNCEMENTS
Dr. Koya, the workgroup facilitator, called the meeting to order at 1:08 p.m. She thanked the CIS Workgroup members, Maryland Board of Physicians (Board) staff, Board Counsel, and Peggy McElgunn (Alliance of Cardiovascular Professionals) for their participation. Dr. Koya provided information about two upcoming meetings at which the CIS Workgroup’s recommendation will be discussed: the Board’s rad tech committee on September 26, 2018 and the Board meeting on October 17, 2018. She asked members who can attend to provide their names to Ms. Van Horn.

Dr. Koya noted that CIS Workgroup members were given a copy of a letter from Delegate Bonnie Cullison and Senator Craig Zucker.

APPROVAL OF MEETING MINUTES
Mr. Nicklas suggested an amendment to the August 20, 2018 meeting minutes. Dr. Albornoz made a motion to approve the minutes with the amendment. Ms. Moore seconded the motion. There was no opposition to the motion; therefore, the minutes were approved.

PRESENTATION FOLLOWUP
Ms. McElgunn was not present. Dr. Koya utilized this time to invite Ms. Fowler to report on a survey conducted by Howard Community College regarding possible licensure of RCIS in Maryland.

MARYLAND BOARD OF NURSING STATUTE
Ms. Darin reported on her research into the scope of practice of nurses to determine if nurses could perform fluoroscopy. She opined that the scope of practice is broad and is dependent on education and training. She noted that fluoroscopy is not explicitly included in, but it is also not excluded from, the scope of practice for nurses in statute.

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1 Dr. Marine called in while traveling to the meeting and arrived at approximately 1:40 p.m.
2 Ms. Smith called in for the vote on the CIS Workgroup’s recommendation later in the meeting.
3 The full name of the committee is: Radiation Therapy, Radiography, Nuclear Medicine Technology, and Radiology Assistance (rad tech) Advisory Committee.
CALIFORNIA EXEMPTION INFORMATION
Ms. Pervola reported on the California fluoroscopy permit. She also referred to the fluoroscopy examination, which is administered by the American Registry of Radiologic Technologists (ARRT).

PROCEDURES CHECKLIST
Ms. Moore discussed the Board’s application for nuclear medicine technologists (NMTs) in Maryland to operate a CT/nuclear medicine device, which includes a verification of procedures. Ms. Moore suggested that this document could be adapted for RCIS and fluoroscopy studies as a training requirement that an RCIS had to complete before assisting in fluoroscopy procedures.

LICENSURE QUESTION
Dr. Albornoz had inquired with Board staff (by e-mail following the August meeting) about possible licensure of RCIS and grandfathering to allow enough time for RCIS to make adjustments. Dr. Koya noted that Ms. Darin advised that the matter would depend on the way the statute was drafted (if there’s licensure of RCIS in Maryland).

CONSENSUS POINTS
Board staff drafted consensus points based on the discussions of the CIS Workgroup through the August meeting. Dr. Koya led discussion of the consensus points, which were organized under four categories: Patient Safety; Supervision of CIS/Practice Setting/Duties; CIS Education/Examination; and Legal/Licensure Matters. CIS Workgroup members covered several topics, including the meaning of autonomous practice and the physician’s responsibility for machine settings. CIS Workgroup members suggested changes to certain consensus points and one category title, and they voted in favor of removing one consensus point.

Board staff will update the consensus points and will send a revised draft to CIS Workgroup members. The final version will be included in the CIS Workgroup’s report to legislators.

CODE OF MARYLAND REGULATIONS (COMAR) 10.32.12
Ms. Darin informed the CIS workgroup members about the Board’s current regulations for physician delegation of acts to unlicensed individuals. If the CIS Workgroup is thinking about an exception to licensure, language could be added to address RCIS.

JOINT COMMISSION DOCUMENT
Ms. Vranian reported on the Joint Commission’s “Standards Revisions for Organizations Providing Fluoroscopy Services.” She highlighted paragraphs about ongoing education and radiation exposure.

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4 The Board’s document is an application for approval of a Nuclear Medicine Technologist to operate a CT/nuclear medicine device for a diagnostic CT or non-diagnostic attenuation correction with or without intravenous contrast. The application includes a form for verification of the completion of 20 successful intravenous contrast injections and an attestation form.

5 There was a break from approximately 2:30 - 2:40 p.m. during the discussion about the consensus points.

6 The document, issued June 25, 2018, states that it is applicable to hospitals effective January 1, 2019.
DUTIES OF RCIS IN MARYLAND
At the August CIS Workgroup meeting, members reviewed a scope of practice drafted by Dr. Albornoz to describe “reasonable” duties for RCIS in Maryland in an invasive cardiac cath/electrophysiology lab. There was agreement on seven items listed as “clinical” duties and discussion about an eighth item also to be listed as a clinical duty.

Ms. Moore inquired if Mr. Sibley, an RT, could assist with a review of the remaining duties listed in Dr. Albornoz’s document. Dr. Koya invited Mr. Sibley and Ms. Fowler, an RCIS, to comment on certain items listed as possible X-ray duties.

Ms. Darin opined that establishing a list of agreed upon clinical duties would help to clarify what an RCIS is currently permitted to do, as an unlicensed individual, in Maryland, if the CIS Workgroup were to recommend no change to statute. She reviewed the CIS Workgroup’s options for a vote: (1) Status quo; (2) Option A or option B of exception language for Health Occupations (H.O.) Article, §14-306, Annotated Code of Maryland; or (3) Licensure for RCIS.7

Dr. Koya opened discussion on the standardized objective criteria, beginning with Issue 1: “Risk of Harm to the Consumer,” which appeared to be weighing against licensure.8 During discussion of Issue 2, “Specialized Skill and Training Required,” Ms. Moore expressed that this factor was weighing heavily for licensure. Dr. Koya asked Ms. Moore, Ms. Pervola, Dr. Albornoz, and Dr. Marine to form a breakout group to discuss whether the education and training of RCIS is sufficient.

After a break from approximately 3:41 p.m. to 3:54 p.m., Dr. Albornoz reported that the group discussed the concerns of Ms. Moore and Ms. Pervola about the education and training of RCIS in radiation safety for work in the catheterization lab. The group came to the conclusion that, for the workforce issue, the best option is for an exception to licensure with a requirement that the RCIS have adequate training in fluoroscopy basics. The group suggested imposing a time limit of two or three years for the exception to licensure while licensure is being pursued and patient safety is monitored. Ms. Moore added that the RCIS should be a graduate of an accredited program and complete a certain number of procedures (a checklist) under supervision before assisting in fluoroscopy in the catheterization lab.

Delegate Cullison noted that there is precedent for a program to have a trial run for three years with a report back to the legislature and that a bill could have a requirement for statistical reporting by hospitals. Ms. Witten commented about current state and federal procedures in place for hospital data reporting and compliance matters and inquired about how the data would be used. Dr. Albornoz opined that data could include information on patient safety matters and, in regard to the workforce issue, information about hospitals’ use of staffing agencies. Ms. Witten mentioned that the Maryland Health Care Commission (MHCC) reviews patient outcomes; therefore, MHCC already has certain authority regarding the quality of programs.

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7 In Maryland, under H.O. Article, §14-306(e), only a licensed individual may perform X-ray duties involving fluoroscopy.
8 In preparation for the meeting, Board staff, in consultation with Board Counsel, drafted an analysis of the objective criteria to facilitate discussion.
Ms. Dukovec referenced the requirements for catheterization labs under COMAR 10.24.17, and she discussed the National Cardiovascular Data Registry.  

Dr. Koya asked Dr. Alborno to repeat the items agreed upon by the breakout group. Dr. Alborno stated that on a provisional basis, sufficiently trained individuals in fluoroscopy with the RCIS credential via an accredited program can work under an exemption to licensure. Patient care will be monitored. If the trial run fails, licensure may be required. If the trial run is successful, the exemption could continue or the possibility of licensure could be revisited as a long-term solution. Ms. Moore stated that she would like to see a procedures checklist included as well. There was discussion about when such a form should be completed and who should keep the form. Dr. Chiaramonte expressed concern about having a trial run without a specific goal (of licensure) and relying on hospitals to verify qualifications of RCIS. Dr. Marine commented that there already is a mechanism for oversight, and there could be a certain penalty for hospitals that fail to comply.

Dr. Koya reiterated certain consensus points indicating that, among other things, RCIS would not be autonomous, would work only in the cardiac catheterization lab, and would press the fluoroscopy pedal only at the direction of the cardiologist in emergency situations. There was additional discussion about the MHCC reviewing patient outcomes in hospitals and about the use of the term “assisting” with fluoroscopy.

Dr. Koya asked for a motion to accept the concepts agreed upon by the breakout group to use as a guide. Mr. Nicklas moved the motion, and Dr. Marine seconded. There was no opposition.

Ms. Darin reviewed a draft of two options for statutory language for an exception to licensure. The term “performing” will be replaced with “assisting” in regard to fluoroscopy. There was discussion about the regulations promulgation process. Ms. Moore expressed concern about RCIS who have on-the-job training, but did not have fluoroscopy training in an accredited program before sitting for the credentialing exam. In response to a comment from Ms. Pervola, Dr. Koya suggested changing “physician” to “cardiologist” in the consensus points.

Ms. Witten noted that the Maryland Hospital Association would be supportive of the second option for exception to licensure language if the provision regarding hospital compliance was modified.

Dr. Koya requested a vote on the second option for an exception to licensure with a three-year sunset. Delegate Cullison clarified that there would be an evaluation in January of the third year. Mr. Nicklas made the motion, and Dr. Marine seconded. Dr. Koya and Ms. Darin reviewed the option for Ms. Smith, who had just called in to the meeting. The eleven members present (including two on the phone) voted in favor of the motion.

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9 COMAR 10.24.17 is titled “State Health Plan for Facilities and Services: Specialized Health Care Services—Cardiac Surgery and Percutaneous Coronary Intervention Services.”
Mr. Nicklas indicated that Mr. Fisher, who was not present, supported either option for an exception to licensure. Dr. Koya noted that Dr. Durand voted for the second option for an exception to licensure.

There was additional discussion about the regulations that the Board would be required to promulgate as part of the exception to licensure option that the CIS Workgroup voted to recommend.

Ms. Darin and Ms. Witten agreed to discuss the hospital compliance issue outside of the meeting. Board staff will send to the CIS Workgroup members any change to the draft statutory language.

There was no vote on the other options for RCIS in Maryland (either the status quo or licensure) due to the near unanimous vote for an exception to licensure. Dr. Koya returned to reviewing the objective criteria for evaluating licensure. Dr. Marine suggested that the analysis of the criteria should be identified in the CIS Workgroup’s report as the Board’s analysis of the factors and not the CIS Workgroup’s analysis. Dr. Koya asked CIS Workgroup members to review an early draft of the report that was distributed to CIS Workgroup members and Delegate Cullison. Dr. Koya asked Mr. Nicklas to provide, for the report, information on what led to the introduction of the bill in the legislature. Board staff will be writing a summary of the four meetings and will include the meeting minutes and the consensus points in the report. Dr. Koya asked for comments on the draft report by October 5, 2018.

**ADJOURNMENT**
Dr. Koya adjourned the meeting at 5:10 p.m.

Respectfully Submitted by,

[Signature]

Dr. Yemisi Koya
Director, Communication, Education and Policy Unit

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10 Mr. Fisher had provided a vote via e-mail to Board staff prior to the meeting.
11 Dr. Durand, who left the meeting early, provided a written note to Board staff. Dr. Mahesh was not present and did not provide a written vote to Board staff prior to or during the meeting.
12 After further discussion following the meeting, Ms. Witten indicated that she approved the language as drafted regarding hospital compliance, and no changes to that section were made.