ECHO ESSENTIALS-2018

IV TRAINING FOR SONOGRAHERS: PRACTICING TO THE FULLEST SCOPE OF OUR PROFESSION

NOV. 3, 2018: 1150-1210 pm

UC Irvine Health
DISCLOSURES

LANTHEUS: SPEAKERS BUREAU

Peg Knoll, RDCS, RCS, FASE
Cardiology Management & Non-Invasive Testing Consultant

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714.336.3353
Retired
Or not, if you have a greater need;
Or a project that interests me
Scope of Practice since 1995, 2006 & 2015

Scope of Practice and Clinical Standards for the Diagnostic Medical Sonographer

April 13, 2015

1st Edition: 1995
2nd Edition: 2006
3rd Edition: 2015

STANDARD – ANALYSIS AND DETERMINATION OF PROTOCOL FOR THE DIAGNOSTIC EXAMINATION:

1.3 The most appropriate protocol seeks to optimize patient safety and comfort, diagnostic quality, and efficient use of resources, while achieving the diagnostic objective of the examination. The diagnostic medical sonographer:

1.3.1 Integrates medical history, previous studies, and current symptoms in determining the appropriate diagnostic protocol and tailoring the examination to the needs of the patient.

1.3.2 Performs the examination under appropriate supervision, as defined by the procedure.

1.3.3 Uses professional judgment to adapt the protocol and consults appropriate medical personnel, when necessary, to optimize examination results.

1.3.4 Confers with the supervising physician, when appropriate, to determine if intravenous contrast is necessary to enhance image quality and obtain additional diagnostic information.

1.3.5 With appropriate education and training, uses proper technique for intravenous line insertion and administers intravenous contrast according to facility protocol.
ASE support of sonographer IV insertion & injection

Guidelines for the Cardiac Sonographer in the Performance of Contrast Echocardiography: Recommendations of the American Society of Echocardiography Council on

ASE CONSENSUS STATEMENT

American Society of Echocardiography Consensus Statement on the Clinical Applications of Ultrasonic Contrast Agents in Echocardiography

Guidelines for the Cardiac Sonographer in the Performance of Contrast Echocardiography: A Focused Update from the American Society of Echocardiography

Clinical Applications of Ultrasonic Enhancing Agents in Echocardiography: 2018 American Society of Echocardiography Guidelines Update

Journal of the American Society of Echocardiography
Volume 14 Number 5

Journal of the American Society of Echocardiography
November 2008

Journal of the American Society of Echocardiography
Volume 27 Number 8

Journal of the American Society of Echocardiography
Volume 31 Number 3

2001

2008

2014

2018
This is not new.

SONOGRAPHERS’ COMMUNICATION

Overcoming the IV Insertion Obstacle

Last month, Pag Knoll wrote about the implementation of a strategic plan to train the nursing staff at her medical center to eliminate the utilization of IV catheters. To follow her lead with a description of how and why she did it, at the Methodist Debra Carter Younger Center in Houston, TX, we interviewed the sonographers to smart IV catheters.

Patient satisfaction survey results have been a hospital improvement tool utilized formerly, in the past, how hospitals used the results varied depending on the institution. However, this is changing based on a recent decision by the U.S. Department of Health and Human Services to include certain aspects of the patient satisfaction survey results in the Hospital Compare quality tool. New patients can easily

3 months of different approaches from different regions of the country, hospitals & managers working with what they had at the time. (2008)
Medical Society Urges Broader Role for Sonographers

September 5, 2018

CHICAGO — (Business Wire) — An international physicians group on Wednesday urged medical centers to discontinue restrictive scope of practice policies that prevent qualified sonographers from assisting in administration of ultrasound contrast agents (UCAs) when medically indicated.

“Sonographers play an extremely important role in delivering effective and cost-efficient patient care, and yet too many medical centers still have outdated policies that require a registered nurse or physician to administer UCAs — even when trained and credentialed sonographers are available,” according to Beverly Gorman, a member of the board of directors of the International Contrast Ultrasound Society (ICUS) and Director of Accreditation for Echocardiography at the Intersocietal Accreditation Commission.

“This can effectively deny patients access to enhanced ultrasound imaging where medically indicated, and many of those patients end up with unnecessary and more expensive ‘big box’ imaging,” Gorman added.

According to the International Contrast Ultrasound Society board, which met in Chicago on Wednesday, the exclusion of qualified sonographers by these restrictive policies “can negatively impact patient care and outcomes,” and alternative testing may expose patients to ionizing radiation, result in delays, and increase healthcare costs.

UCAs produce high quality images of tumors and organ blood vessels, and can dramatically improve detection of cardiac abnormalities and risk of heart attack or stroke, according to the ICUS statement adopted Wednesday.

ICUS policy, adopted Wednesday, now “strongly recommends” the adoption of scope of practice policies and procedures that permit qualified sonographers to gain peripheral venous access and administer UCAs — that is, to start an intravenous line and inject the UCAs — when medically indicated.

“There is absolutely no reason a qualified and credentialed sonographer should be prevented from assisting in a contrast enhanced ultrasound procedure, which is an extremely safe, inexpensive, reliable and radiation-free option for imaging the heart, liver, kidneys, and other organs and tumors throughout the body,” according to Dr. Steven Feinstein, a professor of medicine at Rush University in Chicago and co-president of ICUS.

“UCAs offer tremendous benefits to patients, and it is past time to recognize the important role that qualified sonographers play in these procedures,” added Dr. Stephanie Wilson, a professor of radiology at the University of Calgary and co-president of ICUS.

ABOUT ICUS:

ICUS is an international medical society that is dedicated to advancing the appropriate use of contrast enhanced ultrasound to improve patient care. ICUS members include physicians, scientists, and other ultrasound imaging professionals in approximately 60 countries. For more information about ICUS, please visit www.icus-society.org.

CONTACTS:

International Contrast Ultrasound Society

Mark W. Weller, 202-276-7421 or 202-626-8363, mweller@polanelly.com

Linda M. Feinstein, 847-624-1844 or 312-876-2563, Linda.Feinstein@Dentons.com
Be prepared

Dr. Neil Weisman’s 2016 Edlemans lecture [https://www.youtube.com/watch?v=YonYB-GDFLI](https://www.youtube.com/watch?v=YonYB-GDFLI)

What is Disruptive Technology?

- A new technology that unexpectedly replaces established technology

Kodak (1888) developed digital cameras in 1976, did not get on the bandwagon until 2006, bankrupt in 2012 - no more Kodak moments!

Blockbuster in 2004 had 9K stores & 60K employees; in 2000, 3 guys were laughed out of their board room for suggesting DVD by mail which would reduce late fees by $500 M/yr. Bankrupt in 2010

Redbox started in 2002

Those 3 guys founded Netflix, has reinvented itself 3 times (DVD-streaming-original content). Just last month Netflix announced that viewers will be able to choose their own ending for original programs.
Be prepared to change how we train

Top 10 in-demand jobs in 2010 did not exist in 2004

- We are currently preparing students for jobs that don’t exist yet
- Using technologies that haven’t been invented
- In order to solve problems we don’t even know are problems yet
- Below are some of the choices I had when I graduated from high school in 1969

Be prepared to change how we train

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Todays’ in demand job did not exist 10 years ago

- Social Media Manager
- Drone Operator
- App Developer
- Data Scientist
- Sustainability Manager

https://www.youtube.com/watch?v=u06BXgWbGvA
AI

WILL REPLACE THE FOLLOWING POSITIONS

BY 2028

- Speech transcribers
- Translators
- Commercial drivers
- Retail salespeople

BY 2040:

- Surgeons
- Novelists
- Construction workers
- Police

https://www.youtube.com/watch?v=u06BXgWbGvA
AI in Echo

- Auto EF has been around since pre Y2K
- Sinus rhythm & Poor-fair quality images are still factors
- Automation, machine learning & AI are changing the landscape of echo
  - improve accuracy, reproducibility
- The potential is still being discovered as algorithms are being created
- Major tech companies (IBM, Apple & Google) are investing heavily in health card analytics to facilitate precision medicine.

- **Maybe new software will not let us calculate an EF if the walls cannot be seen & contrast is not used.**
- The uses are only limited to our imagination.
Be prepared for constant change

- Technology changes
- Workflow changes
- Changes in health care & these changes are fluid
- Change with the needs to stay employed
CARDIAC ULTRASOUND HAS ALWAYS BEEN EVOLVING

Sonographers have always had to adapt to new & changing technologies to stay in the field.
Fluidity of our profession over the years

1950-1980

1981-2000

2001-2015

2016- DT+AI=?
Retool or retire
Do you remember your first time?
Summary:
1. There is no definitive echocardiographic evidence of infective endocarditis.
Why did we decide to do this? The perfect storm or situation?

Due to patient & test volume changes & changes in fellow training responsibilities, we had to change our workflow using the same number of FTEs. We researched what was being done at other hospitals around CA & the US. We looked at how we could change duties for all staff to practice to the top of their scope.

NPs were overqualified to perform stress tests and were needed to see patients in clinic.

Non-invasive cardiac nurses could be trained to perform stress tests, but then would not be available to start IV’s and push ultrasound enhancement agents (UEA).

Sonographers can start IV and push ultrasound enhancement agents (UEA) which is in their Scope of Practice with proper training.
Change; it’s not for everyone

2% Innovators | 10% Early Adopters | 60% Middle Adopters | 20% Late Adopters | 8% Laggards
Titles matter

Echo tech or technician

Echo technologist

Cardiac sonographer-OCC uses this term, you can correct this at our individual places of employment

Advanced cardiac sonographer

Supervisor

Manager

Educator

Industry
Things You Might Hear

**Ending**

- “No way, it’s against the law in CA for sonographers to start IV’S.”
- “This is not my job.”
- “This has been a great experience.”

**Exploration**

- “There are so many changes that I can’t keep up.”
- “I’ll just stay in the inpt lab”

**New Beginning**

- “This is not my job.”
When you need to use UEA, supported by ASE & IAC

American Society of Echocardiography
Recommendations for Quality Echocardiography Laboratory Operations

A consensus statement for the use of echocardiographic contrast agents has recently been published by the ASE. Contrast can be combined with any of the echocardiographic examinations described above. For resting studies, contrast should be used in patients with poor endocardial border visualization, especially for quantification of chamber dimensions, volumes, and ejection fraction and for the assessment of regional wall motion. Poor endocardial border delineation is defined as inability to adequately visualize two or more contiguous segments in any of the three apical views. Contrast should also be used to assess conditions such as apical hypertrophic cardiomyopathy, noncompaction of the left ventricle, for enhancement of poor spectral Doppler signals, or when left ventricular (LV) thrombus is suspected. For stress echocardiography, contrast should be used when resting images show inadequate endocardial definition for detection of LV wall motion in each coronary artery territory or when adequate images cannot be obtained quickly during stress. When contrast is used appropriately, <5% of TTE studies should be identified as nondiagnostic for the assessment of LV function, and <10% of stress echocardiographic studies should be nondiagnostic for the assessment of regional LV function.20,21

Journal of the American Society of Echocardiography
January 2011

1.6.2.4B Use of Contrast for Suboptimal Image Quality – Contrast is indicated for use when two contiguous segments are not visualized in any three of the apical views (poor endocardial border definition) as it provides greater accuracy in determining left ventricular function.7

i. If contrast is used, there must be a written policy for the use of contrast agents.

ii. If contrast is not able to be used there must be a policy for alternative imaging.

Comment: Poor endocardial border definition is defined as the inability to detect two or more contiguous segments in any three of the apical views.

(See Guidelines below for further recommendations.)
Moderate MS, mean gradient of 7, s/p mitral annular ring insertion, mild lvh. SWMA with a couple surprises that would have been missed without UCA.
Communicating change through leadership

- Managers and Directors are the “bridge” between leadership and end users, providers and patients
- Simple and Clear
- Multiple Forums
- Given-and-Take Communication

Why is the change necessary
- Strategize on who you present plans to first
  - Let them chew on it until they get it
  - Remind often so they don’t forget
  - Don’t give up, wear them down
  - Repetition
Communicating

- Face-to-face meetings are best; involving the all staff, not just cardiac sonographers

- Don’t rely on:
  - Trickle Down Communication
  - Email (not enough), but is great documentation

- Explain expected “wins” early and often (every time you present)

- Expected wins are:
  - Better patient care: safety, satisfaction, quality
  - Working at the top of your Scope
  - Decreased time the patient is waiting for an RN
  - Increased productivity
  - Better patient satisfaction & sonographer growth
  - Access to UEA at satellite clinics that offer cardiac ultrasounds
Being a leader dealing with difficult situations

- Listen before you react: even if you have the answer right away, they need to be heard
- Remember to admit when you are wrong & apologize to the person & in public
- Be a thanking machine: praise publically whenever you possible & in front of higher ups
- Maintain an eternally and contagiously positive attitude: there will be plenty of negative thoughts and fears floating around:

  YOUR ATTITUDE LEADS THE WAY
  LEAD BY EXAMPLE

- Know your culture and personalities: communicate uniquely with each person
Empathy

One of the most valued traits of a good leader.
Resources vary with each organization

**INTERNAL**
- Nurse educators
- Medical Directors
- Managers
- Sonographers
- Cardiac nurses
- Director of Nursing
- Risk Management
- Compliance

**EXTERNAL**
- ASE Contrast Zone
- ASE Guidelines & JASE
- SDMS Scope of Practice
- IAC
- Vendors
October 2015

Benefits of working in a lab with a supportive & appreciative Medical Director

Helps to guarantee excellent patient care

Sonographer safety: injuries, radiation safety, job stress

Honest bi-directional communication, where the reading physician can ask the sonographer to repeat a study for additional images & a sonographer can question a reading physician about an interpretation
ASE RESOURCE PAGE

- http://www.contrastzone.com/
Didactic Training

Who will provide this training?

Your institution?

An independent CME provider?

A vendor?

Schedule in advance

Have a list of dates when working with vendor
Getting started, be strategic

Does your Medical Director & Chief of Cardiology support this?

Start talking about Scope of Practice to the sonographers & let them know its coming, especially for staff not comfortable with change. Supported by ASE & IAC.

What is your facility’s policy is for non-nursing staff to start IV’s? Will you be able to get their approval?

What other non-nursing staff are starting IV’s at your facility (nuc med, EMT, CT scan, etc)?

Speak to the Director of Nursing & Nursing Educators to make sure they will support this & seek their advice. Be pervasive. Have your research ready, made it difficult for them to say “no”.

Once you know you can get approval from the powers that be, proceed.
- Ask HR how much notice the Union needs & plan around this notice.
- Set up a time line.
- If you have sonographers that are interested, get them involved.
- Will the GI lab, pre-op or ED let your staff train with them?
- Once all this is in place, you can work on your training schedule.
Timeline

1-3 years prior, start having talks about this

Get buy in from all parties needed

Arrange with GI, pre-op or ED departments for training

Notify union if needed (60 days with UC system)

**During this period begin didactic IV training by:**

Working with RN, sonographers watch how IVs are inserted & identify which vein to use

Practice doing IV set up & manipulating the tubing prior to working with pts

Start an IV on manager prior to doing “real” patients

The GI nurses were quite impressed that the sonographers were so well prepared, most trainees come with no preparation
Once Union notification date passes, IV training can begin.

Set up an agreed upon schedule with that department.

Proctor 10 additional, successful IV starts in outpatient cardiology

Sign off & certify.

Our nurse educator created a certificate of completion for the staff.
Official training process at UCI

Set up a date for the didactic training. This might take a couple months to book.

Immediately have staff start watching the RNs insert IV and do the set up for them.

Sonographers start identifying which vein they would choose while working with RN.

Identify the area where practical training will take place & set up a date according to the union notification.

Sonographers practice IV set up and manipulation of tubing & syringe on co-workers without inserting IV to gain confidence & manual dexterity. This is evaluated by a trainer prior to actual IV insertions.

All staff must start an IV on the manager & be evaluated on their set up, IV stick and DC of the IV prior to going to the GI lab.
All sonographers keep a log of all IV starts & locations.

1\textsuperscript{st} location is the GI lab, pre-op or ED

2\textsuperscript{nd} location is cardiology outpt.

All sonographers to start 10 successful IVs & 10 injections under the supervision of a cardiology RN before going solo.

This is a revolving project, keep a list of patient populations that sonographers will not start IVs on such as: IVDA, dialysis pts, double mastectomy pts, chemo pts, pts that refuse or are uncomfortable, etc.
March 9, 2017

Mr.
Lead Organizer, AFSCME Local 3299
1740 W Katella Ave, Ste 1
Orange, CA 92867

Dear,

UC Irvine Medical Center is providing notice of our intent to begin utilizing Senior Ultrasound Techs assigned to the Cardiology Lab to start IVs and inject intravenous contrast. Starting IVs and injecting intravenous contrast is a job function that is within the scope of practice of the Senior Ultrasound Techs as outlined by the Society of Diagnostic Medical Sonography; however, they have not been required to start IVs and inject intravenous contrast as part of their routine duties. Training will be provided to ensure those affected are comfortable and competent to start IVs and inject intravenous contrast. The individuals affected by this change are listed below:

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<th>Employee Name</th>
<th>Position</th>
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We plan to implement this function into the routine work responsibilities on or after May 1, 2017.

If you desire to meet regarding this change, please feel free to contact me at 314-458-7876.

Respectfully,

[Signature]

HR Business Partner

cc. , Labor Manager
EXAMPLE: Updated job description

UC Irvine Medical Center

Mission: Our Purpose
Discover • Teach • Heal

Job Description:

UC Title: Senior Ultrasound Tech
Position Number: 10080013
Reports to: Manager
Working Title: Senior Ultrasound Tech
Cost Center: Cardiology Lab (7160)
Bargaining Unit: EX
FLSA: Nonexempt
Date Created: 02/17/2017
Job Code: #3666
Hours: 20.00
Shift: Day Shift

Position Summary:
Incu...
EXAMPLE: Forms, keep them simple

**SONOGRAPHER IV TRAINING LOG**

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<th>PATIENTS WITH CONTRAST REACTIONS</th>
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SHAREPOINT/SONOGRAPHER IV SECTION
Everyone,

I want to thank all the nurses & staff in the GI suite that have been training our sonographers for the last three weeks to insert IVs. We have started a new program that allows sonographers to insert IVs. It is in their scope of practice. We did training in our lab & Gina agreed to have our staff spend a day in the GI suite starting IVs on her patients. The nurses have been amazing & training has gone very well. The sonographers have come back with glowing reports about your staff. Thanks again for contributing to the success of this project.
POLICY:
To establish guidelines in the Cardiac Diagnostic Center for Cardiac Sonographers to perform venipuncture and image enhancement agent (contrast) administration. The scope of practice updated by the Society of Diagnostic Medical Sonographers and endorsed by the American Society of Echocardiography has been expanded to include venipuncture and image enhancement agent (contrast) administration for the cardiac sonographer, under the supervision or direction of a cardiologist.

1. Receive a total of 10 hours of instruction, including the following:
   a. Anatomy and physiology of venipuncture sites
   b. Venipuncture instruments, intravenous solutions and related equipment
   c. Puncture techniques
   d. Techniques of intravenous line establishment
   e. Hazards and complications of venipuncture
   f. Post-puncture care
   g. Composition and purpose of anti-anaphylaxis tray, first and basic cardiopulmonary resuscitation

2. Perform 10 venipunctures under supervision of person certified to perform venipunctures.

7. Using sterile procedure, establish intravenous catheter and secure to patient. Do not attempt a venipuncture more than twice. Have another person attempt to start the IV. If they are unsuccessful, notify nurse, NP or physician
SET UP:

When setting up for a patient that will need both a bubble study & image enhancement agent (UEA), always use the Y connector.

Use the straight connector for UEA only.

PATIENTS NOT TO START IVS ON:

Have a port

Undergoing chemo

History of IVDA

History of double mastectomy (be careful with single mastectomy pts)

ESRD

Pts who refuse to have you start the IV

Cannot see or palpate the vein
Questions to ask patients

When you are talking to your patients during their echoes, ask them the following questions in preparation for the possibility of an IV: If we need to use an ultrasound enhancing agent (contrast).

Do you have a preference to which arm we use? If they answer they are a difficult stick, find out where the nurse is usually successful and apply a warm compress.

Are you taking blood thinners such as: aspirin, Plavix, Ziralto &/or Coumadin? If they do not know, check EMR.
**IV D/C instructions**

**D/C INSTRUCTIONS**

- Place pressure on site for a few minutes if needed (gauze & tape)
- Instruct pt to leave gauze & tape on for one hour
- Patient can resume normal activities
- If you notice any signs of redness/infection call us
- Document in EMR

**COMPLICATIONS**

- Reactions
- Infiltrates
- Extrication: the catheter has not come when the IV was removed
IV training follow-up

Was the training adequate for you?

What would you do different?

What would you add to the training?

Would you increase the number of IV starts before going solo?

Are you ready to start injecting on the inpatient side?

Have any of you injected on the inpatient side?

Was there anything missing from the training?

How did you feel about having to start an IV on me prior to going to the GI lab?

Should that remain in the training?
UCI current status as of Oct. 27 2018

1. Have you updated the IV policy since last January?  No, the policy is still the same

2. Was the vein finder purchased?  No

3. If not, do you think that it’s needed?  There was no need to purchase the vein finder.

4. Have inpt. injections started?  No, but we are in communication with the inpt pharmacist.

5. How is the sonographer IV process going in the outpt lab?  GREAT

6. Do you have any comments about the process that you would want me to share?  No, everything is going well.

Update from Sanam Shirzadegan, BSN, Cardiology Manager
What’s happening at other UC Medical Centers

**UCLA:** Currently at UCLA the outpatient sonographers working in Westwood (main campus) are inserting IV’s and injecting Definity. If the sonographers are having difficulty inserting the IV, we have LVN’s and RN’s on staff who will assist. We have been injecting Definity for a little over 2 years now and have been inserting IV’s since March 2018. We used an outside company for IV training (critical care training center). Here at UCLA nursing administration does not offer IV training to non-nursing employees. Our community practice sonographers are only injecting Definity for now. We are trying to find time in the community practice schedules for IV training.

**UCSD:** As for the IV starts and contrast, we have not gotten there yet. UCSD does have a P&P that allows us to start IV’s (attached), but have not headed down that path. I have everyone trying to get us to administer contrast including the CEO and expect it will happen very quickly after we get our pharmacy policies in compliance. We are very close to achieving pharmacy compliance. If we cannot get approval for sonographer injection by using all our senior management resources, we will ask for a program flex through CDPH. If we get a program flex, then I would share that with some of the other hospitals.

**UCSF:** In process. Dr. Ted Abraham moved there from Johns Hopkin last year where they did sonographer IV’s & injection. He & Dr. Kirsten Tolstrup are pushing it through the hospital channels.

**UCD:** On hold....I have lots of projects on hold, as I am still waiting for my position to be filled.
Sharp Memorial-San Diego:

- Title 17 is more for CVTs in the cath lab. Radiology privileging

Tina Orsag, Cardiology Manager
Scripps Clinic / Scripps La Jolla Memorial Hospital / Scripps Green Hospital:

- Pursuing IV training but still need to get the nursing council to approve it.

- I’ve been fighting for sonographer injection of Definity for a few years now, and have not made much progress with the multiple approval committees, etc.

- I am hoping that if we start with allowing sonographers to give IVs, we can start to make some progress.

- I also reached out to the state of CA (CDPH) and got an email back that said it is up to the hospital administration as to whether or not sonographers can inject... you can include my e-mail in your presentation.

Kristen Billick, ACS, RDCS, FASE  Cardiac Sonography Educator / Lead Sonographer
CDPH e-mail exchange regarding sonographer IV starts

From: Holt, Heidi P. (CDPH-ORSEM)
Sent: Friday, January 26, 2018 9:33 AM
To: Hil, Pamela (CDPH-DPDRS-Rhb)<Pamela.Hill@cdph.ca.gov>
Subject: Other - Kristen Billick

Please respond to this inquiry and copy Heidi Holt on your reply.

If, however, while researching the information on the inquiry from the commenter you become aware that the commenter has also sent the same inquiry through their legislative contact, please coordinate a response through the Division Office.

Thanks,
Heidi

Title
I'm writing to see i...

Submitter Name
Kristen Billick

Submitter Email
wnterblxint@yahoo.com

(224) 593-1867

I'm writing to see if ultrasound techs/sonographers can fall under the subject of the Radiology Technologist scope of practice and thus fall under safety code 100985. While California Bill SB 571 is specific for a radiology technologist, sonographers are also classified as allied health professionals who have the same basic educational requirements, clinical duties and training requirements. I would like to know if we can fall under this safety code so that cardiac sonographers can administer their own intra-vascular Image enhancement agent for suboptimal echocardiograms, just as RTs administer their own contrast. Unfortunately there is currently no practice written up for sonographers in the State of California. We have national licenses through ARDMDS and CCI and a national Scope of Practice through SDMS (Society of Diagnostic Medical Sonographers). In our national scope of practice, it says that we are allowed to inject IVs and administer image enhancement agents intravenously, as needed (with proper training and competencies). For over the past decade +, the use of image enhancement agents, or "contrast," has been used for echocardiograms to clearly visualize the walls of the heart (i.e., Definity, Optison and Lumason). It is well-documented that approximately 20% of echocardiograms are suboptimal and need this contrast to clearly visualize the heart. Unfortunately, contrast is understood in many healthcare facilities due to inadequate education about the product and poor processes, including lack of nursing resources. Because of the scarce we face, often times, poor quality studies are accepted. This can lead to missing critical cardiac findings, resulting in delay of patient care, additional and expensive downstream unnecessary testing, misdiagnoses, lengthened time of stay, and death. What sonographers in many other states do is they legally inject the contrast themselves. They are trained on the contrast product, they pass competencies, and the responsibility is listed in their job description. It is a very similar process to what Radiologic Technologists (RTs) do when they administer contrast for fluoroscopy, CT, MRI, etc. However, the contrast that is given for echocardiograms is an extremely different product (not iodine based, doesn't affect the kidneys, etc.) and is much safer than the typical "contrast" that one typically thinks of when a patient receives a radiologic exam. What is different in California is that RTs have a Scope of Practice through the State of California which states that they are allowed to administer contrast. Sonographers have no Scope of Practice through the State of California and thus it makes it difficult to apply the same rule to sonographers because nothing says that we can't do it, yet nothing says that we can. There was much discussion at last year's American Society of Echocardiography annual meeting about the value of sonographer injection of contrast. Because a lot of institutions around the country have gone to sonographer injection, I decided to write a proposal for my own institution, as it would greatly improve quality, efficiency, and most importantly, patient care. I am still pursuing my endeavor with them, however it was recommended that I try to have something written through the State to support this, just as is done with RTs (or a blessing from the CDPH to fall under the RT safety code). This is my second email to the CDPH; I received no response on the first one. I would greatly appreciate any help in this matter. Thank you, Kristen Billick, ACS, RDMS, FASE

Please close the inquiry within 5 business days (15 business days for complaints).

Thank you,

Heidi P. Holt
Executive Secretary
for Anthony Chu, Chief
Division of Radiation Safety and Environmental Management
Department of Public Health
Direct: 916-449-5913
Heidi.Holt@cdph.ca.gov

----- Forwarded Message -----

From: Russell, Lisa (CDPH-RHB) <Lisa.Russell@cdph.ca.gov>
To: KristenBillick@yahoo.com
Cc: hill, Pamela (CDPH-DPDRS-Rhb)<Pamela.Hill@cdph.ca.gov>
Sent: Tuesday, January 30, 2018, 8:40:19 AM PST
Subject: FW: Other - Kristen Billick

Hello Ms. Billick,
Sonographers are not certified by the RT Act, either in permits or restrictions, so does not fall under the authority of the Radiologic Health Branch as CRTs do. The management at the department you work at, risk management, and legal staff will need to evaluate whether the sonographers may inject. It does sound reasonable to draw the parallel to the CRT scope of practice given similar training and national scope of practice permissions.

Regards,

Lisa Russell
Supervising Health Physicist
Inspection Compliance and Enforcement Section
California Department of Public Health
Radiologic Health Branch https://www.cdph.ca.gov/RHB
Phone: (916) 440-7925
Email: Lisa.Russell@cdph.ca.gov

Collaboration * Competence * Equity * Integrity * Respect * Responsibility * Trust * Vision
Hello Ms. Billick,

Sonographers are not covered by the RT Act, either in permissions or restrictions, so does not fall under the authority of the Radiologic Health Branch as CRTs do. The management at the department you work at, risk management, and legal staff will need to evaluate whether the ultrasonographers may inject. It does sound reasonable to draw the parallel to the CRT scope of practice given similar training and national scope of practice permissions.

Regards,

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What’s happening at your hospital?

Here is the most recent list of CA Hospitals (21) with tech inject policies:

UC Irvine
UC LA
UC SF (in process but almost done)
UC SD (in process)
Rideout Memorial
Marshall Hospital Placerville
Lakewood Regional
Kern Medical Center Bakersfield
Camp Pendleton (can’t confirm as it’s not our account)
VA Long Beach Hospital
Pomona Valley Hospital
White Memorial
Desert Regional Medical Center (updating policy)
Dignity St Mary Long Beach (in process)
Dignity Norridge (in process)
Hoag Newport Beach (in process)
Hoag Irvine (in process)
Torrance Memorial (in review)
San Ramon Regional
Salinas Valley Memorial Hospital
St. Agnes Medical Center Fresno
How I’ve been spending my time
Family additions since I retired

Turning 1 on Nov. 28, 2018

First baby due Feb. 2019

Fourth baby due April 2019
Thank you & remember to vote on Tuesday!!!