## Minutes

### MEETING NAME
WG-01/12 Joint Meeting

### MEETING PLACE/DIAL IN
GoToMeeting

### DATE & TIME
March 8, 2021, 10:00AM ET

### PRESIDING OFFICERS
- Univ. of Utah School of Medicine  
  Bruce Bray, Chair (WG-1 and 12)
- Siemens Healthineers  
  Antje Schroeder, Chair (WG-1)
- Cablon Medical  
  Sander Dekker, Chair (WG-12)

### VOTING MEMBERS
**PRESENT**
- American College of Cardiology  
  Bruce Bray
- American College of Radiology  
  Shekher Maddineni
- Cablon Medical B.V.  
  Sander Dekker
- Canon Medical Systems USA, Inc.  
  Kevin O'Donnell
- GE Healthcare  
  Gopi Pattaswamy
- GE Healthcare  
  Steven Nichols
- Siemens Healthcare GmbH  
  Antje Schroeder
- SuperSonic Imagine  
  Damien Lerat, Alt-Voting

**ABSENT**
- Agfa HealthCare Inc.  
  Paul Seifert*
- American Society of Nuclear Cardiology (ASNC)  
  Peter Tilkemeier*
- Chartwise Medical Systems  
  Jon Elion*
- European Society of Cardiology  
  Nico Bruining*
- Siemens Healthineers  
  Jan-Ulco Kluiwstra*
- Philips  
  Ruud van Silfhout*
- PixelMed Publishing  
  David Clunie*
- Seno Medical Instruments, Inc.  
  Bryan Clingman*

### OTHERS
- Siemens Healthineers  
  Marti McCulloch, Observer
- Northwestern Memorial Hospital  
  Jim Thomas, Observer
- Advanced Surgical Visualization Consortium  
  Paul Sovelius, Observer
1. OPENING ITEMS
   - Call to order: The meeting was called to order.
   - NEMA Antitrust rules and DICOM Patent Policy were read.

2. REVIEW AND APPROVE AGENDA
   The agenda was reviewed.

3. REVIEW MINUTES

4. TOPIC ITEMS TO BE DISCUSSED
   - Fractional flow reserve measurement- https://link.springer.com/article/10.1007/s10278-015-9837-x - Did not discuss
   - Review of IHE Radiology AI paper- For public comment in the next (month). They request lots of comments and feedback from members on the call.
     (will send out)

   **Action:** All-Jim Thomas request to review:
   https://jamanetwork.com/journals/jamacardiology/fullarticle/2776714

   **AI via**- Request to add a few items to DICOM header for company and radiotherapy. A few settings, including TGM. Sander Dekker put together a proposal on clinical applications. Ultrasound for brachytherapy. Not known what the slice thickness is. Now, have to manually calculate for every transducer. Not possible to do on large volumes of data. Can use the summary in case study for a more medical angle of the topic. DICOM header on AI. Comment would be interested for what object you’re using. Basing on the old. Encoding 3D volume is not well integrated yet.

   (Brachytherapy)

   IHE -more about workflow than data elements. Is there a list of items like TGC and slice thickness that is there in some document? IHE is focused overall workflow and not specific modalities. More about what data repositories. At the profile level, CT and MR have already started. Could look at what they are doing and what could be used in Ultrasound. IHE whitepaper is more on overall landscape for AI.
Jim Thomas—working on a project with a student related to this interested in nuts and bolts of the DICOM settings. Use cases related to cardiac Ultrasound. Jim Thomas to connect with Caption Health with the AI company doing the interpretation.

**Action:** Carolyn Hull to share via email with WG-7 Brachy when have something available via email only as an FYI.

**Action:** Carolyn Hull sent out IHE paper 3/17—please comment.

- **Quality/Physics Topics**
  - Next topics from these:
    - AAPM Quality Assurance Elements status update
    - 1975 and 1951—review of implementation outreach
    - Members to the status of current CPs re: AAPM topic:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Submitted Affects DICOM Part</th>
<th>Assigned</th>
<th>Coded Status</th>
<th>Comments/Actions for WG-1 and WG-12</th>
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</thead>
<tbody>
<tr>
<td>1975</td>
<td>Active image region overlay</td>
<td>Dekker 3 Solomon 2-assigned</td>
<td></td>
<td></td>
<td>In letter ballot adopted and included in standard.</td>
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<tr>
<td>1951</td>
<td>Ultrasound Probe ID</td>
<td></td>
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<td>Final text adopted and included in standard</td>
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- **Cardiac topics, link here:**
  - **Global longitudinal**—Question from Jim Thomas on measurements—
  - [https://docs.google.com/spreadsheets/d/16Ndb_dKIVzYDfEwWHWuAqJr-yvcl2sFYIx65XshJERc/edit#gid=95478215](https://docs.google.com/spreadsheets/d/16Ndb_dKIVzYDfEwWHWuAqJr-yvcl2sFYIx65XshJERc/edit#gid=95478215): 1950 (Kevin O’Donnell-Strain)—Discussion of this CP.

  Next item: CID models. Will get in touch with LOINC codes. Added apical cap and synonym. Answered questions. Will be reviewed at WG-6 in next few weeks.

  Reference for mechanical dispersion—Paper by: Kristina Haugga
**Action:** Kevin O’Donnell to circulate definitions to the group and the version for WG-6 later.

**Following up on action to request from vendors** vendors on what they would prefer re: dispersion, time to peak strain-report out 18 segment, or 4-5 apical segments.

- (Atrial items will be next-expansions to cover).
- LV- longitudinal strain is specified- individual and average value.
- RV strain- basically copies the LV version. Most things are there for that.

**Following up on** Confirming with Kevin.

- Atrial-need to confirm Rwave and Pwave contraction and for RWave triggered/PWave triggered.

Follow up on: Confirm with Kevin O’Donnell on change proposal. Group members supported moving forward. Another question is comprehensive, pre-or post-coordinated, combinations-radial, circumferential, twist, 3D, etc. for next effort.

Additional topics in strain for later:

Propose precoordinated measures for bolded above.

Next possible additional topics:

- LV-Radial, circumferential.
- Dispersion
- Measurements-apical strain

- Additional Proposals (Kevin O’Donnell):
  - Estimated Fetal Weight Discordance-
  - Shearwave Elasticity-
- Additional potential topics
  - New valve disease guidelines. Additional missing measurements?
  - Tags
  - Review IHE document when available

5. **OLD BUSINESS/NEW BUSINESS**-

6. **DATE AND TIME OF NEXT MEETING**

Monday, April 12, 2021, 10:00AM ET

**ADJOURNED:** at 10:58. 