

**Report from the Initial Planning Meeting of the
Integrating the Healthcare Enterprise (IHE) Digital Mammography Task Force
July 15, 2005**

The Hyatt Lodge at McDonald's Campus
Oak Brook, IL

Present for meeting:

| Participant | Affiliation | Participant | Affiliation |
|-------------------------|--------------------------------------|---------------------|--------------------------------|
| Avraham, Ellie | Kodak | Marshall, Julian | R2 Technology |
| Brossard, Patti | Cerner | Moed, Johan | PlanMed |
| Butler, Priscilla | American College of Radiology | Morgan, Paul | FUJI |
| Cannistraro, Sabrina | Cedara | Neugabauer, John | InSite One |
| Channin, David | Northwestern Memorial Hospital | O'Dell, Dennis | Siemens |
| Clunie, David | Self | Peter, Guillaume | GE |
| DeMay, Shannon | EWBC | Seifert, Paul | Agfa |
| Eisner, Steven | KonicaMinolta | Smith, Gordon, MBA | Massachusetts General Hospital |
| Fand, Aaron | Hologic | Wickizer, Bob | SECTRA |
| Hanson, Sarah | EWBC | Willison, Kathleen | EWBC |
| Ketomaa, Sami | PlanMed | Wolfman, Judith MD | Northwestern Memorial Hospital |
| Loef, Cor | Philips | Zuley, Margarita MD | EWBC |

Dial in Participants:

| | | | |
|--------------|---------|----------------|---------|
| Keyes, Janet | Hologic | Baum, Janet MD | Harvard |
|--------------|---------|----------------|---------|

Summary

Goals for the meeting

- Detail the technical issues with Full Field Digital Mammography (FFDM) and discuss solutions through the IHE framework
 - Identify a few issues that will be relatively simple to solve as **near term goals**, hopefully to be addressed by the **January '06 IHE Connectathon**
 - Identify which are the more complex issues that should be tackled as **longterm goals**.
 - Establish the Technical Committee
 - Establish the editors for the required white paper
- The morning's discussions, lead by Rita Zuley, documented and clarified the current issues preventing the adaptation of Full Field Digital Mammography and encompassed the following as well as the regulatory rules binding mammography:
- I. Portability/ Compatibility Issues**
- A. Soft Copy Review
1. VOI LUT with W/L settings from the vendor
 2. Chest Wall Justification
 3. Flip/ Correct Orientation
 4. Image Labels
 5. CAD Issues
 6. Monitor Standardization
 - a. D-Max black
 - b. Video Cards
 - c. Contrast Ratio
 7. Displayed Magnification/ Mag factor
 8. Maintain black background upon W/L
- The early afternoon's discussion, lead by Dave Channin, detailed IHE operation, with specific attention to the commonality of FFDM issues and the Radiology IHE group B. He iterated the need to define the problems, and the nature of the problem,

i.e.; is it a technical problem? Can the ACR/FDA/MQSA mandates be clarified and translated into IHE/DICOM solutions? Are there novel problems requiring new IHE/DICOM solutions? This portion of the meeting primarily addressed workflow and portability of the digital mammogram and covered the problem.

II. Workflow

A. General

1. IHE Scheduled Workflow
2. IHE Reporting
3. Structured Reporting
4. IHE Post Processing Workflow
 - a. CAD Issues
 - b. 3D and other post – processing

B. RIS/ PACS

1. Modality Work list
2. How to graphically protocol mammography images
3. Synchronous communication between AWS and SCR
4. PACS worklist availability at any SCR
5. Pre-Fetch Issues
6. Storage/ Archive

III. Printing & Removable Media

A. Printing

B. Portability of Mammogram

1. Format/ capacity for burning to CD/ DVD
2. Format/ capacity for uploading images for comparison

In addition a brief amount of time was spent on Raw vs Processed data and where and how processing should take place. There was consensus that this was a complex problem that would be addressed over the next few years.

- The late afternoon's discussion's dealt with defining the near-term and long term issues as well as establishing the members of the technical working group. It was decided that separate planning and technical committees are not necessary; one technical working group will serve both functions.
 - Image display issues will be addressed first because they have already been elucidated in the DICOM standard. This group of problems includes issues (see IA above) such as standardized image labeling, chest wall justification, correct image orientation, application of the VOI LUT and application of any preset window level settings at the diagnostic workstation. The goal was set to demonstrate resolution of some if not all of these issues at the next IHE Connectathon, in Jan, '06.
 - The remaining issues having mostly to do with workflow and image portability were marked as long-term goals (II and III above).
- There was a call for volunteers to serve on the IHE digital Mammography technical working group (see list that follows with "TBDs" to be added as companies select their representatives for the committee). A technical white paper document will come from the technical working group, which will elucidate in great detail the technical parameters of each of the display issues to be included in the IHE mammography profiles. Once the document is finished it will be placed for public comment for 30 days. It was decided that Dave Channin will edit the White Paper with Dave Clunie as associate editor.

IHE Digital Mammography Technical Working Group

- Dave Channin, MD, Editor
- Dave Clunie, MBBS, Associate Editor
- Rita Zuley, MD
- Judy Wolfman, MD
- Jules Sumkin, MD
- Martin Yaffe, PhD, ACR DM Quality Comm.
- Tony Seibert, PhD, AAPM, SCAR
- Eric Berns, PhD, Northwestern
- Kish Chakrabarti, PhD FDA
- Aldo Badano, PhD Display FDA
- Dianne Georgian-Smith, MD

- Gordon Smith, MBA
- Julian Marshall (R2 Technology)
- Paul Morgan (Fuji)
- Guillaume Peter (GE)
- TBD (Siemens)
- TBD (Agfa)
- Mari Varjanon (PlanMed modality)
- Ellie Avraham (Kodak)
- Carolyn Reynolds (Hologic)
- TBD (Cedara)
- Bob Wickizer (Sectra)
- TBD (Konica – Minolta) (Hardcopy)
- TBD (Cerner)

Summary

There was a great deal of consensus on the large majority of issues. It was decided that this mammography working group will be a subcommittee of the Radiology IHE group and that we will follow, to a large degree, that pre-existing timetable. Everyone involved in the meeting felt that this initial gathering was a success both in the attendance and in the willingness of manufacturers to volunteer for participation in the technical working group.

Timing of future meetings to be announced.