

ORCAS XRAY SITUATION UPDATE

Today I met with Paul Webber, UW Biomedical Engineer, Lissa Robertson, Imaging Systems Quality Coordinator for Mt. Baker Imaging, Aimee Johnson of OFHC and Jennifer Taylor of UW Orcas Clinic. I've summarized my take aways below:

Status/Quality of OFHC Xray machine

Paul Webber went over the OFHC xray equipment and said overall it is in good shape

His Recommendations:

- Machine currently in need of oil which insulates the electrical components inside the generator and prevents arcing
- Preventative maintenance every 6 months which should include topping off the oil and changing some parts routinely (the machine has not undergone maintenance in more than 6 months)
- Replace the display, used for onsite image viewing to check image quality, which is losing some lines and at risk of failing unexpectedly at some point

Status of Image Quality

Mt. Baker Imaging radiologist reviewed a series of OFHC images and found the quality to be acceptable.

Lissa Robertson said that MBI radiologists have a policy of not commenting (criticizing) image technique of non-MBI employed technicians

Aimee asked that Lissa from MBI give them feedback on any concern about image technique to encourage continuing improvement

Lissa Robertson who is an RT (Radiologic Technician) had a training session with OFHC staff performing x-rays after our meeting with a plan for 2 further training sessions to assure OFHC staff are using current technique standards for exams. She offered to provide more training if needed – would just need airfare from Bellingham covered.

Logistics of “Pushing” OFHC images to UW Epic system

Paul, Lissa and Aimee agreed that getting the images into UW Epic electronic medical system is achievable with some added steps for OFHC and MBI staff.

Options for transmitting images and reads to UW system:

One option would work like this:

- OFHC staff would call MBI immediately after performing an xray for a UW clinic patient
- MBI has dedicated staff who could “push” the images to the patient’s UW chart for the UW Orcas clinic providers to view with an estimated time of “less than 30 minutes” from time xray is taken until viewable in chart
- MBI radiologists would read the films then report would be pushed into patient’s UW chart. Most reads are within a few hours, often faster. Maximum 24 hours.
- UW clinicians would have the ability to ask for an urgent read from the MBI radiologist and could be called with the result

Other options

- Images could be loaded on to CDs, DVDs or flash drives by OFHC staff once they’ve processed the images (which occurs within a few minutes of taking the image)
- The disk or flash drive could then be given to the patient to take back to UW Orcas clinic
- UW Orcas provider could load the images from the media on to their system for review
- Images could then be sent to UW Radiology to be read

Lissa and Paul are requesting a higher level of access for Lissa in the UW system to be able to track images and radiologist’s reports from OFHC to the UW system to be able to troubleshoot any delays or problems.

There are other options for image transmission including getting permission for OFHC to push images directly to UW Radiology via their VPN. However, Paul noted this approach would require permissions and challenging passage through UW IT’s multiple firewalls. He wasn’t sure UW IT would agree and even if approved would take 6 months to implement requiring “many man hours”.

UW Patient Logistics

- UW would call OFHC to say they are sending a patient for xray
- UW providers would need to generate xray request to print and give to patient
- Patient would have to provide transport to OFHC (patients with limited mobility due to injury or illness would be challenged with these transitions)
- UW patient would need to register at OFHC since OFHC will need to bill for technical fee from OFHC and professional (reading) fee from Mt Baker Imaging
- Patients would need to be educated about the process and advised that their insurance would be billed for these services (from OFHC and MBI)
- OFHC tech performs xray and calls MBI to alert them that images needing to be pushed to a UW patient chart are being sent

- MBI staff “push” images to UW patient chart via their established VPN with UW
- MBI Radiologist formally reads xrays
- Depending on UW providers judgment, patient would need to return to UW clinic for further evaluation/treatment

Financial Issues

- Depending on patient volume coming from UW (Jennifer will try to find out ballpark average xrays per month) OFHC may need additional staffing (and attendant budgetary costs) to assure timely xray access. This issue could be assessed in a few month trial period
- OFHC pays a fee based on image size for uploading. Increased numbers of xrays would increase this cost for them -estimated in the \$100-200/month range
- Increased costs for scheduled xray maintenance (OFHC has not been doing this regularly). Lissa Robertson of MBI is requesting quotes for maintenance
- Buying a new display for the OFHC x-ray set up – estimated \$200-1000 – quote request in progress
- OFHC is contracted with all local health insurance companies. Need to confirm also true for MBI. Out of pocket costs to patient should not change

Other Issues

- Not addressed was what to do about after hours xrays. Providers have had the ability to perform xrays themselves for straightforward issues in the past. How would UW providers access xrays after hours.?
- OFHC has a working ultrasound machine but no tech, so the machine is not currently being used. If volume was sufficient for the 2 clinics together to support the cost of a tech, on island ultrasound (probably all but OB) could be made available again.

