Lessons Learned from Seasoned PACS Administrators

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Background

- Recently started PACS from scratch

- Kelly Murphy
  - NM tech for 10 years
  - Baylor Garland and now Plano
  - Manage PACS
- Kevin Baker
  - MRI tech
  - RIS integrations
  - Worked on different PACS systems
  - Centennial (TENET) Frisco

Lessons Learned Starting with a Brand New Install

- Learn as much as you can
- Contact other admins
- Document everything:
  - Vendors
  - Staff
  - What can the product do?
  - When did we decide what we are doing?

Lessons Learned Starting with a Brand New Install

- Workflow is critical

- Documentation

- What can the system do?

- Write everything down

Retrofit vs New

- Workflow of film is needed
- Guess what PACS will be
- Pre and Post is important
- "Transition" workflow (film-softcopy) is often overlooked

Start from Scratch

- No processes in place: no "pre" present
- Timing is critical
- No physical flow patterns established yet
- Plans might differ from final construction
- Some might be easier

Other Lessons Learned

- Ability to train

- Training documents are needed

- Cheat-sheets

- Clinical background helps (vs. IT)

- Need to work with different people

Documentation

- Vendor documentation not useful
- Not specific enough
- Make own cheat-sheets

Big-Bang vs Gradual Implementation

- Gradual phased in was smoother
- Big-bang difficult because of short window (network drops-power plugs), otherwise easier
- Big bang is taxing for seasoned PACS admin for new admin, gradual is easier.
- For referrals, transition is harder

Use Vendor Processes

- Service support: use the official route
  - Documentation of issues
  - E.g. for device replacement in case of issues

Training

- Challenge!
  - Radiologists
  - Techs
  - Physicians
  - Nurses
- Prioritize
  - Work from the middle out
- Super-users are critical for success
- Group training as well
- Vendor Applications training
  - one week before and during

Training (cont)

- Physicians are hardest to train
  - Less time (30 minutes?)
  - Many physicians
- Radiologist are hard as well: use more tools

- Hanging protocols issue!
  - Facility related (processes by techs)
  - Naming issues as well
  - Require more work by vendors
  - Users need to know how to set them up

Speech Recognition Issues

- Kelly: Speech for every exam (self correct):
  - If more radiologists there could be learning issue
  - Need to train system
  - "uhm" is issue

- Kevin: Use Speech as well
  - Workflow is an issue

Quality Control is Critical

- Check status cancellations, where are the images?

- Images can be lost!

- Preventive maintenance and on-the-fly

- Get things cleaned up asap

- Could be related to workflow issues

DICOM Knowledge is Important

- Header inspection will help
  - Routing info present?
  - Hanging protocols?
  - Modality type
  - Exam parameters
  - AE-titles, IP addresses

Top Items?

- Training:
  - Materials: cheat sheets
  - Manuals
  - Make them self-sufficient
  - Cascading effect