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sense and simplicity

DI-R

The Vendors Approach Challenges and Hurdles

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DI-R Rational and Strategy

**Millions of dollars spent on building large IT projects to address
2-5% of all images**

What was lacking in the strategy was;

- The foundation of a deployed unique patient identifier across a province or a jurisdiction to make all images accessible
- A “Real Time” capability for all other clinicians, specialist and Family Physicians to facilitate immediate clinical adoption
- An evolving technology strategy to address advances impacting cost and efficiency
- A “learning” strategy to build on best practices and experience
- A strong IHF strategy to capture images from clinics to further enhance clinical capabilities

The “ Real” Challenge

- How does the DI-R strategy keep up with a faster developing industry?
- How do we shift from a technology driven initiative to that of clinical adoption?
- How do we learn and improve the DI-R for future sustainability?

Evolving Technology

Are the DI-R in their current structure able to take advantages on newer technology and applications?

The CHI DI-r Blue Print was first published over 5+ years ago outlining the architecture and functionality of a DI-r

Technology advances every 3-6 months (Moore's Law)

Expanding the Role of the DI-R

DI-r must be able to evolve with the imaging needs of the jurisdiction

- Evolve to a true Vendor Neutral Archive
- Provide solutions for accessing and managing, images and reports from 'many-ologies'
 - Digital Pathology, Cardiology, Ophthalmology etc
- Connect multiple image management systems to deliver a unified view to all Clinicians

Recommendation:

- Discontinue making the DI-R larger and focus on accessibility

Storage Virtualization

Advancements in Storage will Negate the need for large Data Centres and Compressed Images

Virtual Storage Modules

- Decrease the Archive Storage footprint by 80%
- Single rack can store 450TB or 6.0M studies
- Decrease H/W, HVAC, operational requirements, management costs
- Decrease storage per TB or study costs
- Potential impact, each DI-R would need one or two racks of only!

Recommendation

- Implementation of VSM, could have the single biggest impact on saving money and increasing operational efficiency

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XDS-I

The XDS-I standard has largely been driven by the CHI blueprint for Radiology

The challenge of XDS-I

- For an international vendor there is very little demand for XDS-I Internationally
- Standard is considered far from mature
- Deployment is only in initial or beta stages
- Development is evolving from integrated PACS S/W to an independent appliance based technology

Recommendation

- Delay deploying XDSI until it is mature, tested and ready for full operational deployment.
- Re-focus on the clinical adoption, integration into the HAIL, Local EMR first

Clinical Adoption

Clinical Adoption: The most missed opportunity to have an immediate impact on patient care

- The largest impact to e-health adoption, access to images and reports
- DI-R by design only cater to the radiology users that sees images from other locations
- Emphasis now on the radiologist to check for priors

Recommendation:

- Enhance point of care service by providing diagnostic quality image access in concert with electronic medical records across the jurisdiction

Incorporate the IHF

Capturing the IHF imaging will complete the DI model.

- Up to 50% studies performed in clinics do not become accessible to the current record
- Study duplication, wait times, repeats and radiation are all adversely impacted
- Clinics have largely been left out of the loop and do not trust the current models

Recommendation:

- Each DI-R should be responsible for hosting &/or capturing all clinic images in a non competitive, secure environment

Score Card Assessment

Evaluate and publish a score card for all DI-Rs to date;

- Independently measure each DI-r up against their original RFP requirements
- Measure KPI and correct deficiencies where necessary

Recommendation:

- Incorporate evolving technology strategies
- Adopt Best Practices from other DI-r implementations
- Develop a Clinical Adoption Strategy to incorporate all stakeholders
- IF required implement a course correction