



WHAT MORE INTELLIGENT IMAGING DATA MANAGEMENT MEANS TO PACS ADMINISTRATORS AND IT PERSONNEL

FROST & SULLIVAN WHITEPAPER CHAPTER

DANIEL RUPPAR - CONSULTING DIRECTOR, HEALTHCARE & LIFE SCIENCES

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Introduction

Healthcare IT teams keep inpatient departments, outpatient services, and administration running smoothly. Their guidance is instrumental in setting the course for a digital transformation journey. Provider organizations can progress to a new horizon of digitally enabled patient care when IT teams have the right technology, applications, security, and storage methods in place to improve top and bottom lines as well as patient outcomes.

Meeting Needs and Desires of PACS Administrators and IT

According to a 2018 publication in *Journal of Digital Imaging*, 41% of healthcare facilities experience routing delays when obtaining medical images, which can lead to treatment delays and negatively impact patient outcomes¹; an issue given to PACS Administrators and IT to solve. PACS administrators and IT teams focus on maintaining PACS systems, planning and technology strategies, technical support, and addressing and managing the impact of imaging IT on overall enterprise IT infrastructure.





When it comes to imaging data and information management PACS admins and IT are going to shoulder a burden in helping to solve challenges of their own, as well as other user stakeholders coming to them looking for help.

Challenges faced by PACS admins and IT, when imaging data is not managed, include:

- Unification and integration problems
- The need to reroute data and studies
- Manually fixing and updating data
- Use of translation tables attempting to align vendor-specific metadata
- Difficulty finding information people need in the available data sets as is

These challenges drive a higher than optimal burden of imaging on overall institutional IT – both related to the performance of the organization’s infrastructure (e.g., from high demand on bandwidth from study rerouting), and volume of focus in terms of time. Neither of those scenarios is something providers want to happen today. With the progressive digital transformation of the provider market, IT must manage a continuously expanding range of stack components, devices, applications, communication services, and storage. The greater the mindshare and headaches created by imaging, the less the ability of IT personnel to focus on other responsibilities that could positively impact the business.

Supporting PACS Admins and IT via Effective Data Management Practices

When provider institutions have an effective approach to imaging data management in place, including the right processes and automated technologies the responsibilities and experiences of PACS admins and IT are improved. For example, with good data governance, standardized descriptions and consistent ontology exist, including for prior studies archived. Then PACS admins and IT have a better way to build and maintain the imaging routing solutions and can do so in a way that is vendor-neutral and PACS independent in any environment. The result of that is studies are routed appropriately and consistently - to the right worklist and radiologist, thereby reducing imaging’s impact on the network, saving bandwidth.



With effective data management everything is also scalable in terms of practices for imaging data, which means PACS admins and IT can easier address the volume of disparate sites that can exist in a health system today, and deal with expansion when new hospitals, radiology groups, etc. are added to the organization. Scalable practices are imperative today given frequent provider sector M&A scale changes, and volume of disparate sites to address.

Through the use of AI, a more intelligent approach to data management can be deployed, overcoming challenges and aligning to the imperatives of PACS Administrators and IT for their work experience. Providers must ask themselves whether the organization has the right imaging data management approach to best enable its IT transformation and overall infrastructure requirements.

Conclusion

With clean, standardized, anonymized, and quality imaging data, PACS administrators and IT personnel can benefit from improvements such as more effective use of IT team resources on high-value tasks, and network capacity. Overall, addressing data standardization and anonymization together provides the necessary foundation to empower IT teams enhancing their department's work experience while catalyzing performance across the entire enterprise.



Sources

1. Pianykh, O. (2018). Why do we need cloud-based medical imaging?. *Journal of Digital Imaging*, 31(3): 283-289.

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