Cover Story

Pandemic Prevention Strategies
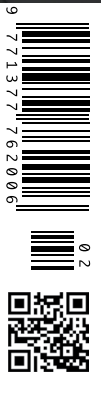
Improving Workflow Through Enterprise Imaging

⬡ **Author: Bob Craske | Departmental Solutions Marketing Director | North America | Agfa HealthCare**

COVID-19 continues to present new challenges to healthcare providers. As a leading healthcare IT partner, Agfa HealthCare is committed to supporting its clients during the COVID-19 crisis. Health Management.org spoke to Bob Craske, the Department Solutions Marketing Director for Agfa HealthCare to discuss Agfa's newest Enterprise Imaging platform that facilitates image exchange, universal viewing, and cloud-based sharing and helps create more efficient workflows throughout the health system.

✓ Key Points

- Agfa HealthCare's Enterprise Imaging solution (Agfa EI) is a complete platform for the management of image based medical records, from acquisition through to results distribution.

- It is engineered to support remote diagnostic services from both an architectural and work perspective.

- Agfa EI uses a rules-based workflow engine to assist

- customers in organising increasing and complex workloads.

- The platform allows customers to expand their image management strategies at their own pace, just as they did when the EHR was introduced. Consider Enterprise Imaging to be the IHR, or the Imaging Health Record, complementing the EHR.

What is Enterprise Imaging? Can you provide us a brief overview?

Agfa HealthCare's Enterprise Imaging (Agfa EI) is a complete platform for the management of image based medical records. Purpose-built as a single stack of services with a single database, Agfa EI allows our customers to share these services and expand their image management strategy from traditional departments such as radiology and cardiology. Different service lines throughout the enterprise can apply those same proven services without the need for additional infrastructure costs. Agfa EI is our fastest and newest platform. Our primary goal was to develop a new paradigm for helping our customers achieve effective clinical, business, and operational strategies for image based medical records. The platform combines all the essential services required to do image capture, display, reporting, and results distribution for all images, including DICOM and non-DICOM. Agfa EI is not only useful for traditional radiology or cardiology workflows, but can be deployed across all image producing departments, including clinical photography, wound care, dermatology, ophthalmology and more.

Can you talk about how radiologists have had to switch to remote/home reporting during the COVID-19 pandemic and whether you think they will continue to do so post-pandemic?

COVID-19 has placed different constraints on many different customers, depending on their location. We have a platform that can adapt to their changing needs by, for instance, providing them with mobility, with the same experience they have in the hospital, but now at a remote location. So, whether it be their home, a remote office or wherever they choose to work, the clinician can stay productive, with the patient information securely and readily available. Our platform is able to provide the same experience with the same performance independent of location.

This has proven to be crucial in our current COVID-19 world. Our customers were easily able to relocate radiologists' display stations from the hospital environment to their homes with essentially the same user experience and level of service available to them.

As with other industries, we see COVID-19 will change the way people work and remote reading will be the norm going forward.

What benefits does Enterprise Imaging offer to radiologists in terms of remote working, workflow and user experience?

Enterprise Imaging is engineered to support remote diagnostic services from both an architectural and work perspective. By permitting the diagnostician the ability to match their personal preferences and experience, there is no need to adjust workflows and expectations (such as display protocols and processing capability). The user experience is identical, regardless of location. This is a vast improvement from the old-fashioned use of different viewers across different locations. We believe in one user, one experience.

How can Agfa EI help manage increased clinical imaging volume and changing demand due to COVID-19?

Enterprise Imaging is an ever-evolving platform, and Agfa HealthCare is committed to its constant improvement to meet the emerging demands placed on our customers. As volumes increase within the institution or across its affiliates, Agfa EI will use its rules-based workflow engine to assist customers in organising the increasing workloads. From activity overviews that organise tasks, through prioritisation lists and escalation workflows, timely healthcare delivery can be provided across dynamic workloads. Our platform is also highly scalable. The technology is replicated on virtual machines and there is no need to reconfigure the system, thus making it easy to scale.

Also, it is important to understand that until recently, clinical imaging volume has actually decreased as a result of COVID-19 because non-elective procedures have been delayed. However, the number of chest ultrasound, chest x-rays and chest CT has increased because they are the primary diagnostic tools being used for diagnosis during COVID-19. Therefore, we're not seeing a shift in volume but a shift in volume type. But, volumes are starting to return to normal and our platform is designed to handle the changing demands.

Do you have any examples of customers who have adapted to this new delivery model? What has been their experience? Any challenges they've faced?

Agfa HealthCare has many Agfa EI customers who employ remote reporting. Their profiles run the gamut from smaller institutions who employ non-local diagnosticians through traditional models altered by the pressures of the pandemic. Their experiences have been very personal, as we all know staying productive while working at home is a unique challenge. The Agfa EI workflow engine has been designed to provide identical user experience regardless of location and removes the additional challenge of adopting to a different viewer or workflow and allows the consumer to transition between the two models easily. I recently spoke with a "remote" diagnostician who works from multiple states to support one institution and his emphatic statement to me was, "If you took Agfa EI away from me, I would likely choose to retire rather then go back to disparate workflows."

Does EI work efficiently for multi-facility networks or is it better designed for single department use?

Enterprise Imaging employs a new paradigm in workflow organisation based on tasks that cascade the study from order to results. These tasks are organised by any combination of customer preferences, from the traditional modality workflow through to specialty and location tasks. The workflow engine allows our customers to focus on what is most relevant to their responsibilities as well as ensure the user is aware of all reporting tasks regardless of origin. Enterprise, by definition, means mutli-facility networks but single departments can benefit as well. We find that some customers deploy Agfa EI as a single department solution and then wish to extend the platform's services and benefits to additional service lines. The technology stacks are modular, so it is easy to expand its footprint.

How can you make it easy for radiology departments to use EI? Do you offer remote demos, remote installation etc.?

We really enjoy demonstrating our solution for radiologsts and other clinical care givers. That's when we can 'brag' about how we can help them read with more confidence, in the most timely way, from wherever they are located. Just recently I have been working with a long standing customer to help them leverage the new workflow model available in Agfa EI. My team, as well as our applications, R&D and product management groups have provided remote education to hundreds of Agfa EI customers across the globe, essentially imparting best practices learned from a variety of institutions.

Once a decision is made to move to Agfa EI, our Professional Services organisation engages the client's teams with our expert implementation methodology. This proven gated and accountable process guides the client from building Enterprise Enablement, through Business Process Transformation, all the way to the Go Live and beyond.

Do you think Enterprise Imaging can enhance the role of the radiologist in the post-pandemic world?

Absolutely. A radiologist or cardiologist or any diagnostician has to be seen as a valuable link and contributor in the chain of healthcare. I think collaboration and putting a face to a report and creating the interactive session or capability allows radiologists and cardiologists to establish themselves in their own community.

As a healthcare IT provider of a 'mission critical' application, we are deeply committed to support our clients' efforts during and after the COVID crisis. We already established COVID specific workflows and developed new collaboration technology working with Mircrosoft Teams® that will be used long after COVID is behind us.

Will remote working and reporting continue to be essential in a post-COVID world?

I don't expect remote reporting to ever go away. I believe it is going to become more and more the norm. It is true that we are in the midst of a pandemic and need remote reporting. But I think what's going to happen is that it's going to afford radiologists an understanding of what it is like to work at home. It's not just about technology; it's learning the behaviours of working at home once that has been established, and maintaining your focus and your productivity. I think the pandemic is really just a catalyst for something that was waiting to happen.

Do you think this platform could have any impact on radiology training?

We've developed a platform that offers the ability to do all of your work virtually. This includes rounds, or teaching sessions, or the ability to review an image together even if you're 3 miles apart or more than 300 miles apart. That's powerful education that can still be maintained, even strengthened. And that is critical. Within our platform, we have both what's called peer review, which is sort of a standard reading and accreditation of diagnostic quality and we offer new workflows for peer learning, which is an advanced take on peer review. Peer learning allows our customers to create learning tracks to provide user experiences to help students understand what they need, how they need it, what they're doing in their report and so on. It gives them the opportunity to learn from those with experience. And it can all be done virtually.

If you were to list a few reasons why radiology departments should transition to Enterprise Imaging, what would those be?

The first reason would be our consolidated platform approach, allowing customers to expand their image strategies at their own pace, to deploy modules in as many or as few service lines as preferred and replace disparate departmental solutions. The Agfa EI consolidated platform technology emulates the EHR model of reducing complexity and redundancy across the enterprise.

The second is the power of the desktop to deliver standard and advanced image processing of nearly any medical image in one viewer, leveraging a powerful workflow engine. Eliminating so many specialised viewers allows our customers to stay focused on one desktop with one workflow, regardless of simple or advanced needs.

Thirdly, Agfa HealthCare has had an Enterprise vision for more than 10 years and was the first technology provider to bring that concept to market in the early 2010's. Experience can not be easily developed overnight and our customers have chosen the EI platform to leverage Agfa's experience as a partner, a guide and a consultant in order to achieve their strategic and operational objectives. ∎