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the above security measures and login requirements, but we can deactivate the software remotely as well.

Has RadApp™ had any notable beneficial impact on radiologist burnout?

While our original primary goal was to improve the workflow and efficiency, we've noticed that the app had positive effects on the work environment. Many of our users provided positive feedback that the app helps reduce the demands and stress of trying to reach the appropriate tech for a study acquisition, paging a referring physician for a critical finding, finding a useful reference or hospital policy quickly, or dealing with administrative tasks on the go. The feedback we've received and lessons we've learned further reinforced the role of tools such as our app solution to meet the increasing

demands on physicians and trainees to multitask and be able to access, synthesise, and apply evolving and growing amount of data and knowledge.

Has RadApp™ encountered any implementation roadblocks?

The biggest challenges we've faced were during the development of the software. From the beginning, we set lofty requirements of developing a solution that is user-friendly/versatile, easy to use and maintain, secure, customisable, and pertinent to daily work. It also had to contribute to the user's efficiency, effectiveness, education, networking, patient safety, and evidence-based care delivery. We built upon our experiences as physicians and trainees who worked in a variety of healthcare settings and used a multitude of electronic medical

resources and available software tools. Once we achieved these goals and created our prototype, our next challenge was to ensure operability on both iOS and Android based devices and the functionality of the software on both phones and tablets with various screen sizes and hardware specifications. Lastly, we went through countless layers of testing and evaluation of our security measures prior to internal evaluation by our own medical informatics department, then ultimately our department-wide implementation. I really enjoyed every step of this journey, and I find it extremely rewarding when I see users rely daily on this solution for optimal healthcare delivery. ■

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How Digital Transformation Can Enhance Healthcare Staff Communication

Summary: An initiative in Spain is tapping into the wealth of digital and non-digital communication amongst staff for streamlining information in an innovative interconnective platform called Plan Adapta.

Communication among healthcare professionals: what a challenge. Innovation propelled by technology is one of the most significant opportunities that big organisations, such as our hospital, have as tools to fuel change.

When it comes to supporting the flow of daily information and putting digital transformation on top of the cultural change journey in a hospital, traditional help, like EMRs, email, intranets and

others do not show enough flexibility, adaptive behaviour or focus on team building and management to provide the soundness necessary to follow the path of clinical conversation.

On a day-to-day basis, the real steady stream of clinical information, despite the intensive use of EHRs, comprises the vast number of telephone calls, countless instant messages, thousands of face-to-face conversations and many

multidisciplinary meetings among carers. A wealth of clinical information is hidden there, so the temptation to apply secure technology to those scenarios is as strong as the benefits of habilitating our nurses and physicians with sufficient tech to act on these concepts.

With this kind of strategy in mind, in the summer of 2018, the Hospital General Universitario Gregorio Marañón launched a regional initiative, called

Plan Adapta, to deploy a platform that could cover as many different scenarios as possible. The aim was to promote the use of tools to maintain staff interconnection, either through instant messaging, audio or video-chat, video and document collaboration, anywhere at any time. This covered doctors, nurses, management staff or IT personnel, in a secure way, and with the possibility of sharing historical or new documents.

It can be argued that “there’s nothing new under the sun,” but the ordered professional usage of these tools is challenging and brings a fresh perspective to the conversation. Technology in itself does not open doors for improvement, and therefore implementation and adoption must be complemented with transition change management and establishment of use of protocols following good practices of methodologies driven by the leadership of the Information Systems Area. This has been our approach. The use of the corporate application promoted regionally, in its instant messaging functionality, implies use cases that involve redefinitions in the field of Human Resources, security and services organisation. This implies a complete change management application, with a common benefit that ends in an improvement in the quality and safety of patient care.

How Does It Work?

What is given to staff is 1 TB per person in the cloud, plus a complete platform that performs with desktops or any mobile device, the features to stay connected and secure interchange of information via calls, messaging, channels, teams and collaboration. Last but not least, we are also offering the staff integration with other apps in order to draw process diagrams, event approval diagrams, information analytics, planners, task and event programmers, and others.

This change raises the need to create specific clinical protocols for use of the application and rules of use for

professionals, the signing of specific clauses for use of mobile devices and how to behave on and off duty. This is critical to adapt ourselves and the staff to the advancement of technology itself. The intention is to facilitate the adaptation of the possibilities offered by technology to the operation of the hospital and not vice versa.

On the other hand, and already more specific to the Information Systems Area, we must ensure compliance with the security of the Spanish National Security Scheme (ENS), keeping information accessibility on a 24/7 basis, and providing enough support to anticipate misfunctionalities.

Outcomes

First, the immediacy of a secure connection from any location, even outside the hospital, to any clinical session of the clinical services or in a multidisciplinary manner, such as Tumour Committees.

In addition, the system allows the sharing of documents instantly (no more versioning of documents by email), the sharing of medical diagnostic tests, direct communication between professionals of different services to communicate transfers of patient clinical information, second opinions, questions and inquiries about protocols and procedures.

The system also offers immense new opportunities like the improvement in the quality and safety of patient care, fulfilment of the EMR and other applications live in the hospital.

Finally, we should emphasise the ease of adoption of these tools within the Plan Adapta, given the great similarity with other existing tools available in the market for these purposes and extensively used in private life. The main aim is to cover a real need demanded by professionals with the possibilities offered by technology and within necessary security limits.

For the Hospital General Universitario Gregorio Marañón, keeping leadership in Digital Transformation is much more than maintaining a framework

of corporate applications; it must be combined with tools that really support change of hospital culture, creating the road of quality of care and safety on the care we are providing. ■

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Key Points

- Streamlining communication amongst healthcare personnel is an ongoing challenge.
- Plan Adapta offers a secure platform that comprises multiple communication modalities.
- Plan Adapta complies with security of the Spanish National Security Scheme.
- Staff are given Cloud gigabytes and access to a platform with the features to stay connected both within a hospital and externally.