

# NHGD partners with Carestream Health to deliver leading imaging service

*Want to go digital but don't know how to get from idea to output? Carestream Health uses a solutions-based approach to deliver a digital workflow that meets the needs of your organisation today with the room to grow tomorrow.*

As the leading provider of imaging services within Singapore's primary care setting, National Healthcare Group Diagnostics (NHGD) is dedicated to continuous service improvement and business excellence. NHGD has partnered with Carestream Health since 2006 to implement innovative digital imaging solutions across its 22 sites that have improved both the quality and cost of care.



The business group has employed a suite of Carestream Health digital imaging solutions together with other systems to meet the needs of its imaging centres, including the KODAK DirectView CR 850 system and KODAK DirectView CR 975 system with the KODAK DirectView CR mammography feature, and KODAK DryView laser imagers (DV8150, DV8900, DV6800), along with CARESTREAM RIS, IMS and PACS. Strategically, the decision to convert to a digital workflow across the entire image life-cycle [from patient booking and image capture to reporting and archiving] has enabled NHGD to streamline processes and workflow at all points of care, said NHGD's Radiography Department Head, Sherrie Lim. 'The turnaround time for both image capture and reporting has been significantly reduced while the RIS scheduling module ensures we make the most of the resources available to us in terms of booking patients and managing throughput.'

Moving from traditional film-screen radiography to digital radiography has both clinical and operational benefits, said Emma Cacayan, System Administrator, Radiology Systems. 'Clinically, CR systems deliver better image quality than conventional film methods due to the greater latitude and the accompanying software tools that allow image enhancement. Operationally, images can be kept for longer periods without degradation or risk of losing the image.'

A number of the imaging sites operated by NHGD in the north-western region of Singapore are situated within polyclinics. The digital solutions employed have helped NHGD extend its diagnostic imaging into these communities and bring its services closer to patients, said Emma. 'Traditionally, imaging services were only available at hospitals. These services were neither easily available nor accessible to the general public not requiring secondary or tertiary care. The versatility of the teleradiology set-up has made it easier for us to extend the scope of our services into the community setting, where they are much needed.'

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As such, the introduction of teleradiology within NHGD centres and polyclinics was a major milestone for NHGD, said Sherrie. 'Radiologists from our 4 reading centers can report on images sent from all 22 satellite sites including 4 mobile sites. That's a major achievement for us.'



## Solutions-based approach offers unique benefits

Adopting a digital workflow has delivered numerous benefits, said Emma. 'Our usual report turnaround time was around 3-5 days with conventional radiography. But the workflow benefits of CR have increased our productivity, enabling us to deliver reports within an hour of image capture. This has obviously led to improved satisfaction for both patients and their referring physicians.'

'We have also been able to reduce the number of repeat examinations, reducing radiation exposure for patients. We can now create multiple copies of an image easily and store images electronically. This reduces the number of "lost" films and aids image comparison between new and old films.'

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Along with improved turnaround times, NHGD has reduced its film printing costs and lowered the total cost of ownership for its IT infrastructure by using Carestream Health's solution-based approach, said Emma. 'The cluster storage system makes it easy for us to store, retrieve and send images, regardless of modality, location or vendor. Images from all our sites are stored within a central storage archive, the capacity of which can be increased easily, as the volume of images grows.'

For more information about Carestream Health, visit [www.carestreamhealth.com](http://www.carestreamhealth.com)

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## Vendor support infrastructure ensures smooth transition

While the Carestream Health products had to integrate with existing systems and equipment from other vendors and various modality platforms, the staged installation went smoothly, said Emma. 'We had a smooth transition from conventional radiography to CR. There was the occasional hiccup during the initial trials but they were quickly sorted out before the final installation was done. Carestream Health was very supportive throughout the entire process and we continue to get a quick response from them when dealing with any queries or problems.'

Implementation was aided by the user-friendly nature of the Carestream Health products, said Emma. 'Our staff find the Carestream Health solutions easy to use. Indeed, the intuitive user-interface [common to many Carestream Health products] was key to our purchase decision. Interoperability was also important. We still have centres that use CR systems from other vendors. The ability of CARESTREAM RIS and PACS to integrate across platforms means we can deliver a seamless service despite this diversity.'

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NHGD will continue to work with Carestream Health to customise the solutions in place, as NHGD's business needs change, said Sherrie. 'A digital workflow opens up all kinds of opportunities for productivity and service improvements. We are still working with Carestream Health to customise particular features. For example, tagging of critical or abnormal results. We expect that this additional customisation will progress our digital workflow further and deliver even greater productivity benefits in the future.'

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