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About Rigshospital
Rigshospital is a highly specialised hospital which is organised under the Capital Region of Denmark. With a few exceptions, Rigshospital covers all medical specialist areas and is one of Denmark’s largest workplaces with about 8,000 employees working in more than 50 professional specialities. The hospital is one of Denmark’s largest educational institutions within medical science and a large number of staff employed in the Danish national healthcare system have been wholly or partly trained or further educated at Rigshospital.

About Trauma Center
As a Level I Trauma Centre, Copenhagen University Hospital (known locally as ‘Rigshospital’) employs medical professionals in all specialties including emergency care and post-traumatic reconstructive surgery. Rigshospital Trauma Centre is a highly specialised unit that receives severely injured (> 1,000 patients/year) and acutely ill patients (c.450 patients/year) from the eastern part of Denmark. Seriously burned patients from all over Denmark are also received for treatment at the Burns Centre (c.250 patients/year). The emergency department treats in the region of 12,000 patients per year. Rigshospital Trauma Centre has been acquitted for ensuring that critically ill patients that come through its doors have an extremely high chance of survival.

The Challenge
Copenhagen University Hospital (known locally as ‘Rigshospital’) employs an army of highly specialised personnel with expertise in all areas of emergency medicine. The most extreme and critical trauma cases in Denmark are brought here, to the Level 1 Trauma Centre of the Rigshospital. Treating around 12,000 serious trauma cases per year, the challenges are dictated: every second counts, proven technology and state-of-the-art workflow.

The centre’s dedicated trauma room can appear very crowded to the uninitiated due to the amount of specialist emergency care equipment installed, including that required for trauma imaging, as well as all the specialist trauma care personnel busily working in close proximity to one another but actually they all form part of a well-oiled and disciplined machine with one aim only: the care and successful treatment of all patients that enter its hallowed space.

In severe trauma cases every second counts for each patient and the high level of experience and expertise enables the trauma teams at Rigshospital to carry out rapid diagnosis and effective treatment immediately without any loss of precious time.

In emergency departments doctors need to assess their patients quickly and, depending on the patient’s condition, possibly commit on additional diagnostic examinations required as the necessary specialist equipment is not always immediately close to hand. If time is not a critical factor the patient can be moved to another department for further investigations to be undertaken and for diagnosis to be made. The appropriate treatment can then commence. However, in order to provide the best chances of patient survival for the critically injured, the appropriate treatment needs to be determined rapidly and accurately at the point of initial examination allowing immediate and effective treatment to commence. In a matter of minutes and sometimes seconds the condition of trauma patients can deteriorate; this is why time is such a critical factor.

Doctors and specialised trauma personnel at Rigshospital took up the challenge to improve outcomes in their hospital. To achieve this they investigated the existing trauma patient workflows to learn where time could be saved including analysing the number of treatment steps, the waiting times for diagnostic results to be returned, workflow workarounds and the time needed to relocate patients to different areas and departments for further investigation and treatment. The Rigshospital trauma team undertook extensive research and team members visited leading trauma centres in the United States to increase their knowledge and learn new ideas and trends being practiced in emergency care from other specialists. Finally they came up with a concept whereby all equipment for diagnosis and treatment are located in the same area.

The Solution
The trauma room specification was finally decided and has an area of approximately 25 x 15 metres. The room has a central command and control area; the remaining room space is able to be divided in multiple ‘rooms’ using flexible dividers depending on the current requirement. Two Computed Tomography (CT) Scanners were installed which can be moved into position on rails and three digital trauma X-ray systems were also delivered. Many well-known manufacturers submitted their proposals for this prestigious project...
but it was local company Santax Medico, the Canon and DelftDI distributor in Denmark, that won the day and was chosen to install the X-ray equipment into this single space. Two DelftDI ‘Trauma DR’ systems and one ceiling suspended DelftDI ‘Intuition DR’ system were installed and are able to image simultaneously over 3 patient trollies.

Rigshospital selected the DelftDI Trauma DR systems for their unique manoeuvrability around immobilised patients, which is an absolute must in trauma care. All three X-ray systems are equipped with fixed and portable Canon Flat Panel Detectors and advanced Canon imaging software for unsurpassed speed and image quality with the digital X-ray images displayed almost instantaneously in the trauma room right at the point of care where they are needed. But none of the superlatives, commonly used to describe these Canon DR systems, were a surprise to the staff at Rigshospital; only a few years earlier the hospital and its patients had benefited from two digital chest radiography systems and one digital general radiography system, complete with Canon Flat Panel Detectors, installed in the Radiology Department by Santax Medico and so the quality and speed of these products was already proven and well appreciated.

An Educated Choice

The trauma team at Rigshospital studied all of the available options and quickly realised the significant benefits of choosing DelftDI and Canon solutions provided by local specialist Santax Medico:

- Instant image display and greatly improved workflow as a result of the superior performance of Canon Digital Radiography Systems and Canon Digital Imaging Software
- A purpose-designed X-ray imaging solution thanks to specialised trauma X-ray solutions from DelftDI, a Canon Company
- Effective advice, design and installation followed by outstanding service support provided by an approved Canon DR solutions provider - Santax Medico
- Total peace of mind as a result of extended product warranties

Canon PACS

In addition to the 3 trauma radiography systems, Santax Medico was also able to provide a Canon PACS (Picture and Archiving Communication System) designed specifically for the Trauma Centre. This enables this medical team to quickly and easily view, distribute, archive and recall all diagnostic images within the hospital. All-in-all Canon’s Danish distributor can be very satisfied with this exceptional installation, not only by providing Rigshospital with a custom solution for specialised Trauma Digital Radiography but also with a bespoke Healthcare IT solution. Commenting on the completion of the installation, Peter Blonk, Director of Canon Medical Systems Division said:

“For mobile trauma teams or general hospital care, Canon has the diagnostic imaging answer for any circumstances, featuring a unified look, feel and user interface. A broad range of DR systems perfectly matches the needs of healthcare professionals everywhere. High throughput and an optimized workflow are now secured with advanced Canon Healthcare IT solutions. We are extremely proud of Santax Medico and their significant achievement in Copenhagen”.

About Santax Medico:

It’s establishment in 1954, Santax Medico is seen as an expert in medical imaging solutions. Headquartered in Aarhus, Denmark and with local regional offices, Santax offers complete high quality solutions for diagnostic imaging. Santax Medico creates customer value through innovation, consultancy, training and service.
Canon has been an innovator in Medical applications for over 70 years. Since 1940, (when Canon’s first medical application was introduced - an innovative X-ray application for tuberculosis screening), Canon has delivered many world firsts in the area of radiography and eye care. Today Canon’s extensive line of Digital Radiography systems, diagnostic Eye Care equipment and Healthcare IT solutions are used in hospitals, medical and screening centres as well as in a wide range of challenging environments. Canon is continuously working on enhancing patient care, image quality, portability, versatility and workflow. For further information about the Canon Medical Imaging Group and details of local distributors please visit: www.canon-europe.com/medical