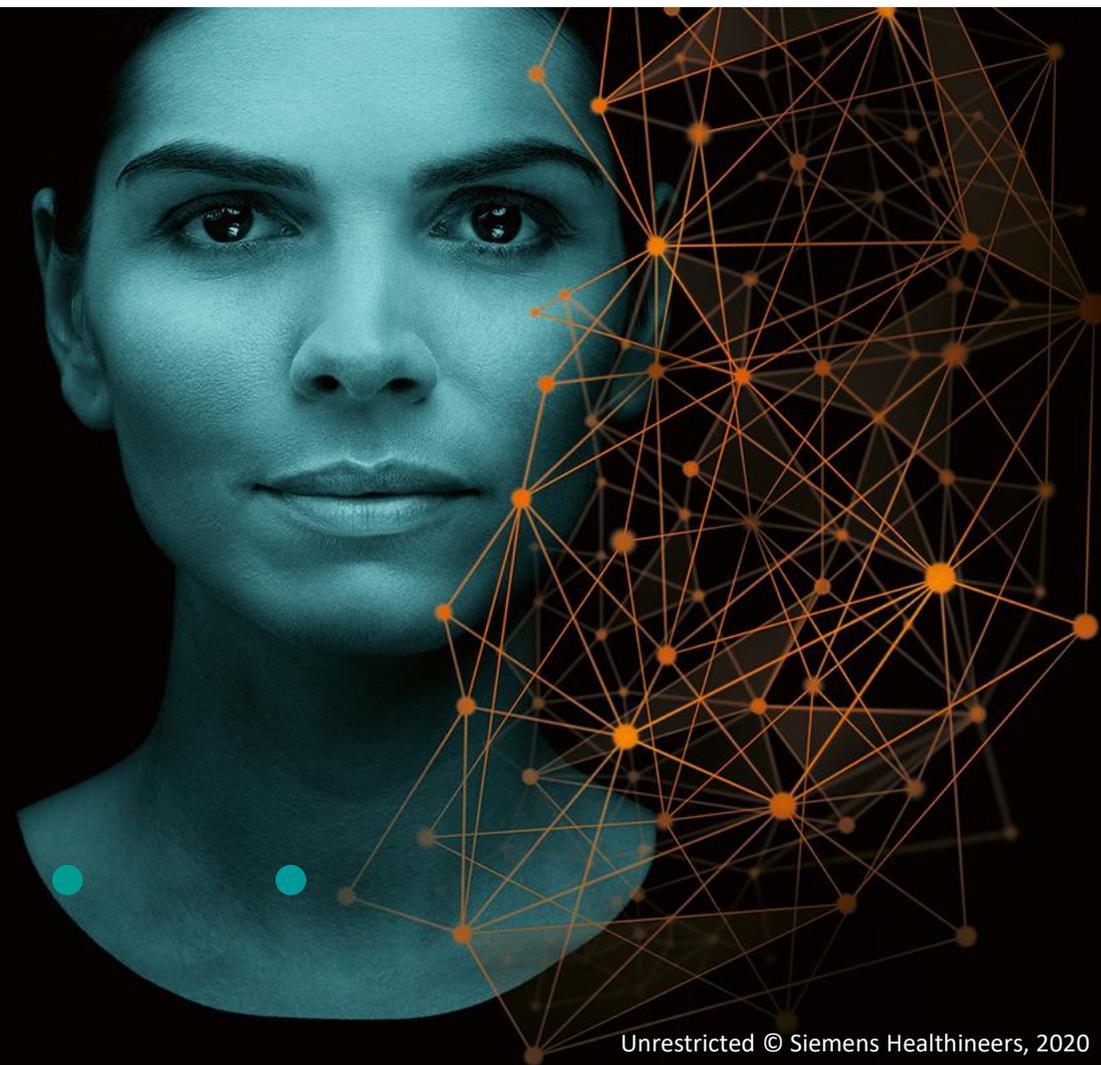


# Blended Learning Education

Success Stories



# Increase workforce productivity

## High service delivery achieved with online and onsite training

### Blended Learning Strategy



### CIM Laennec, Saint-Grégoire, France

“The installation of the go.All has been optimal. From the first day we were able to perform all the urgent examinations of the clinic (~15) and from the second day all external and hospital patients (~30). Before we started, the application engineer prepared around forty protocols adapted to our needs. This process allowed us to become familiar with the platform, which we did not know, very quickly and very smoothly. We quickly moved to the phase of optimizing protocols and improving image quality with the radiologists. In one week, 10 technologists were confident in using this new modality”

Nicolas Couëpel, Technologist

### Challenge

#### Optimize image quality

Experienced user with high expectations on image quality on the new SOMATOM go.All system

#### Optimize clinical operations

Advanced procedures needed to be performed from the start of daily operations

#### Manage reputation

Perform training while meeting high service delivery demands from in-hospital, emergency and outpatient departments

### Solution

- The existing customer relationship was leveraged to implement a blended learning approach, with elements of the user training being delivered remotely
- Protocols based on the SOAMTOM Edge were implemented for the SOAMTOM go.All and were remotely customized by a senior Clinical Education Specialist using the SmartSimulator\*
- Pre-training materials were assigned to groups using PEPconnect

### Value contribution

**>45 Patients**

**≈10 Techs**

Scanning from **Day 1**

Scanned within the first two days of training

Trained and confident in using the new scanner

Ability to scan high priority patients with confidence



The results by customers of Siemens Healthineers described herein are based on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g. hospital size, case mix, level of IT adoption) there can be no guarantee that other customers will achieve the same results.

\*Not for clinical use. For training purposes only.

# Enable efficient operations from day one using digital technologies

## Blended Learning Strategy



### Palace Hospital, Mandalay

“This training met our expectations, we could reach the prescribed goals timely according to prepared schedule. Problems beyond the scope of the training could be discussed and solved remotely.

Virtual training seemed to be real, except for the practice with real patients. With the support received from the training team we could confidently learn the new scanners functionalities and apply this knowledge in a virtual work environment using the Smart Remote Services. Even though full virtual training is not as perfect as the on-site training, this training was very helpful and effective in this pandemic situation”

Mya Mya Chaw Su, Chief Imaging Technologist



## Challenge

### Travel restrictions

COVID-19 lockdown prevented Application Specialists from Siemens Healthineers from reaching customer site

### Instant operational efficiency

Adapt to remote training situation and provide operational effectiveness immediately

### Manage reputation

Enable end users to operate the system immediately and efficiently to meet operational demands

## Solution

- Delivered handover customer training remotely using the Smart Remote Services (SRS) connection and Microsoft Teams to enable end users to operate their system immediately
- Mandatory initial training on PEPconnect was assigned to the radiographers. This provided the knowledge foundation of scanner features and technology before remote training could commence
- Scan protocols were created prior to the remote training sessions using SRS
- The usage of all the scanner features and technology in a clinical scenario was demonstrated and discussed using SRS

## Value contribution

# 100%

# 1<sup>st</sup> Time

# Scanning from Day 1

Radiographers trained on-line using Smart Remote Services

For the customer to be trained with a blended learning and digital technologies

Ability to scan routine cases and confidently resume daily operations

# Increase workforce productivity: Improving the efficiency of training: much faster, much easier

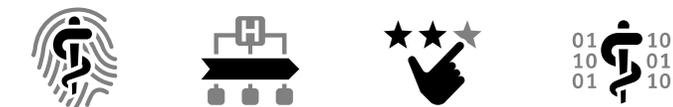
## Blended Learning Strategy



### Santa Maria della Misericordia, Udine, Friuli Venezia Giulia, Italy

“The Virtual Training provided us operational effectiveness during the COVID-19 outbreak. All the team was able to attend and join remotely. Thanks to the SmartSimulator\* we could learn the user interface, the acquisition parameters and simulate the operativity of the scanner CT SOMATOM go.Top without any pressure. Despite the lack of previous knowledge about Siemens technologies, we’ve been able to scan routine examination before on site training could commence. Thanks to the blended learning the training was faster and easier”

Erica Trevisan, Radiographer



## Challenge

### Optimize clinical operation

Operational effectiveness from day 1 for users without experience on equipment from Siemens Healthineers

### Improve staff engagement

Provide fundamental product knowledge to entire workforce by using digital technologies

### Improve clinical reputation

Focus on the most important advanced clinical procedures with the onsite training

## Solution

- Created a blended learning curriculum to train more than 10 technologists to operate the CT scanner
- Pre-training of the CT scanner’s functionalities and capabilities was done using PEPconnect
- Training was managed using PEPconnect and SmartSimulator\*, and Microsoft Teams as communication platform, and was performed over 2 days (split into 2 shifts with 5 participants per shift). Participants were trained on the CT scanner with virtual acquisition workstations using SmartSimulator\*s in a Virtual Classroom setting
- Protocol customization was performed using the Smart Remote Services (SRS) connection during regular follow ups

## Value contribution

# >10

Patients scanned before on-site training could commence

# >10 Techs

Trained online to confidently enable daily operations

# <3 days

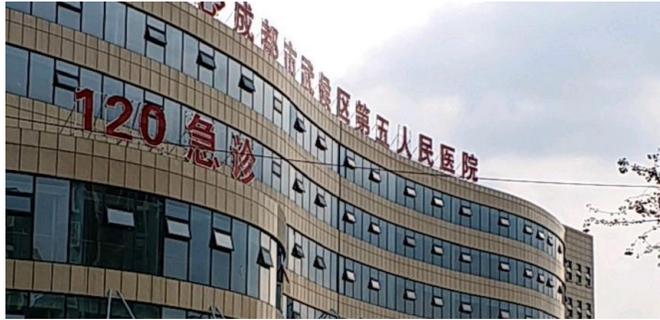
Of onsite training to scan advanced clinical procedures with confidence

The results by customers of Siemens Healthineers described herein are based on results that were achieved in the customer’s unique setting. Since there is no “typical” hospital and many variables exist (e.g. hospital size, case mix, level of IT adoption) there can be no guarantee that other customers will achieve the same results.

\*Not for clinical use. For training purposes only.

# Flexible and efficient advanced training with digital technologies

## Blended Learning Strategy



### Chengdu Wuhou District Fifth People's Hospital

“Through this remote training approach, more participants were able to attend the training. This proved to be highly efficient. We could solve problems at hand quickly. Training time was flexible, which was very important to us”

Mr. Deng Jia, CT Technician

## Challenge

### Expand clinical capabilities

Introduce product fundamentals to a large group of technicians

### Fixed training time

Difficult to reach all technicians for training due to very busy schedule, and changing work location

### Achieve customer confidence

Perform training and continue clinical operations efficiently

## Solution

- Blended learning approach, where virtual training prepared the ground for on-site advanced CT training
- Online collaborative tools allowed technicians to participate in Virtual Classroom sessions that covered theoretical content, enabling multiple users to attend the same training
- Each technologists could be trained on virtual acquisition CT workstations using SmartSimulators\*
- Remote support was provided using the Smart Remote Services (SRS) connection

## Value contribution

**-2 days**

**100%**

**>90%**

On-site follow-up reduced to achieve same overall training quality

Technicians trained on-line, otherwise not possible with prior on-site approach

Of follow-up questions could be answered immediately on-line



The results by customers of Siemens Healthineers described herein are based on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g. hospital size, case mix, level of IT adoption) there can be no guarantee that other customers will achieve the same results.

\*Not for clinical use. For training purposes only.

# Increase operational efficiencies with remote Handover Training using digital technologies

## Blended Learning Strategy



**Orlando Health Orlando Regional Medical Center, Orlando, Florida**

“The pre-education was very helpful and having that resource is awesome. This combined with their onsite training make the transition very smooth!”

Terry Meierkort, Lead technologist



## Challenge

### Increase efficiency

With product training on completely new user interface and technology

### Improve quality of care

By optimizing scan protocols to different clinical workflows focusing on dose minimization

### Manage reputation

Avoid shift of patients to other sites by achieving confident routine operation shortly after initial training

## Solution

- Developed a blended learning schedule to complete training on the CT scanner for the 8 technologists slated to operate the system. Mandatory Initial training on PEPconnect for lead technologist
- Scan protocols were created in advance using SmartSimulator\*, this enabled focused training on routine workflows during the onsite visit
- Protocols from existing SOMATOM go.Top in outpatient center were adapted to X.cite in main hospital, minimizing adoption time

## Value contribution

**<80%**

Of onsite time was spent on protocol configuration

**>8 Techs**

Trained with PEPconnect, greatly increased confidence with new platform

Scanning from **Day 1**

Safe and confident scanning of routine and specialized procedures

The results by customers of Siemens Healthineers described herein are based on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g. hospital size, case mix, level of IT adoption) there can be no guarantee that other customers will achieve the same results.

\*Not for clinical use. For training purposes only.

# Enable accessible and highly efficient remote training with digital technologies

## Blended Learning Strategy



**Charles LeMoynes Hospital, Longueuil, Quebec, Canada**

“The remote features provided by Siemens Healthineers are integral during this time to ensure staff safety, and in the case of Virtual Cockpit Light to enable DI staff based outside the ER to easily assist and troubleshoot with technicians operating the CT in the ER”

Julie Audet, Assistant DI Manager

## Challenge

### Increase efficiency

Deliver training remotely to technologists during the COVID-19 pandemic

### Leverage digital innovations

Where staff requires training and confidence when adopting new technologies

### Achieve a seamless start

Use the SOMATOM Definition Edge to its full potential from day 1 using online training solutions

## Solution

- Developed a blended learning schedule to train 20 technologist on the CT scanner
- Pre training on CT scanner functionalities was completed on PEPconnect
- Four Virtual Classroom Trainings were delivered using Microsoft Teams while each technologist completed their training using individual SmartSimulators\*
- Real-time remote support and access to Applications Specialists was provided using Smart Remote Services connection
- Access to operate the CT console from remote locations was achieved with *syngo* Virtual Cockpit

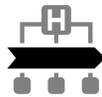
## Value contribution

**>20 Techs**   **1<sup>st</sup> Time**   **Scanning from Day 1**

Trained remotely, significantly reducing onsite training effort

For the customer to be confidently trained with blended learning and digital technologies

Ability to scan high priority patients with confidence



The results by customers of Siemens Healthineers described herein are based on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g. hospital size, case mix, level of IT adoption) there can be no guarantee that other customers will achieve the same results.

\*Not for clinical use. For training purposes only.