

# Many questions, but only one patient

As the focus on efficiency continues to increase, physicians rely on you for quick and confident diagnoses. But your patient may present with multiple different scans and multi-dimensional data. Do you have the right tool to provide an objective and quantifiable diagnosis others can depend on?

Say hello to the IntelliSpace Portal 7.0. It combines high quality images, precision analysis, and workflow efficiency tools into a single advanced analysis solution. Get a unified view of your patient's condition all on one screen to answer questions fast.

#### **Key benefits**

Have the right tool when you need it with a broad set of clinical applications covering multiple clinical domains

Obtain a multi-faceted view of your patient's condition using a single multi-modality solution

Work consistently and efficiently thanks to unified user interface and workflow acceleration features

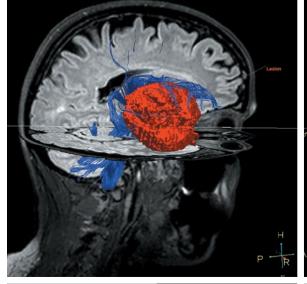
Integrate with your hospital PACS\* and information systems, with a tailored platform

Use one solution connecting your entire radiology department, easily accessed from nearly any computer and integrating datasets from multiple vendors\*

\* Please contact your local Philips representative for details on multi-vendor coverage.

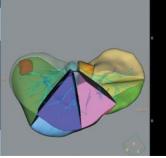
The IntelliSpace Portal has really helped us simplify and streamline our workflow. It has all the necessary tools for a complete evaluation of the dataset. It's a real time-saver for the radiologist."

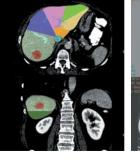
J. Louis Rankin Franciscan St. Francis Health, Indianapolis, USA



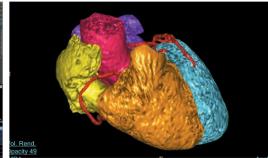




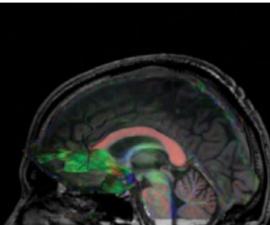














## What's new for you?



#### **Exceptional clinical depth**

Many existing applications have been enhanced to enrich clinical decision support data, like MM Advanced Vessel Analysis (AVA) and Neuro Perfusion-Diffusion Mismatch. New measurement and interpretation tools as well as enhanced segmentation support your confident diagnoses, so treatments can be tailored to improve patient care.



#### Further streamlined workflow

Faster image transfer and enhancements like automatic creation of MPR and volume-based images help reduce time to results. Collate patient findings into a single report for export directly to patient reporting tools like PowerScribe360. And Philips KnowledgeScape training provides real-time tips on application usability during a case.



#### **New clinical capabilities**

Expand your clinical capabilities with new applications like CT Pulmonary Artery Analysis\* to aid in the detection of pulmonary embolism, and a COPD application for lung disease management. New Ultrasound applications are also designed to enhance your analysis of cardiovascular and breast disease.



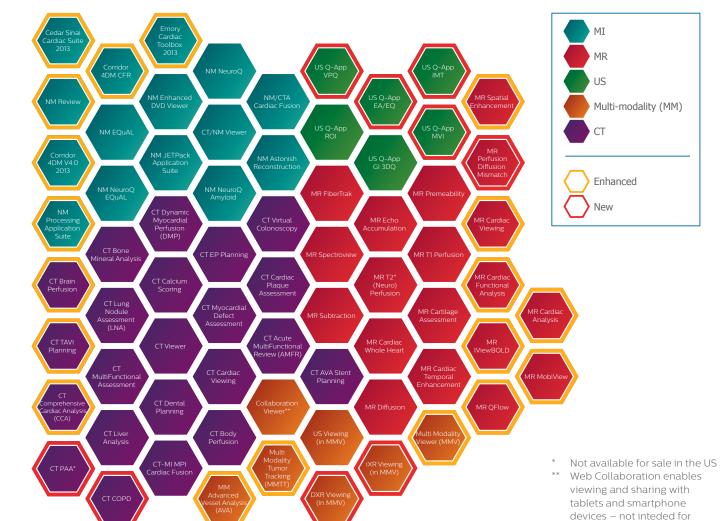
#### **Enhanced multi-modality capabilities**

Use multiple image types to provide superb care for your patient, such as combining MR, CT, and MI for tumor tracking. Now you can also review and analyze Philips iXR and general radiology datasets too.



#### **Smooth integration**

VNA and HL7 integrations closely tie the IntelliSpace Portal to your hospital network. Reconcile disparate patient records, for example, or even integrate with Allura interventional systems to automatically select and launch relevant advanced analysis tools before intervention – even beyond the reading room.



## What would you do with one more hour each day?

#### Obtain results faster

The IntelliSpace Portal automates image processing as well as many of the manual tasks that can get in the way of delivering fast, efficient input to patient treatment. It pre-fetches all prior studies, for instance, and transfers them to a local folder along with any new ones for fast comparison. Zero-click processing also uses a variety of automatic tools to begin preparing your case, so you're ready to work when you open it. And if you need on-the-spot instruction for key applications, KnowledgeScape clinical education brings you up to speed fast.

#### **Work 50% faster with CT Liver Analysis**

Perform liver segmentation and volumetry in just 10 minutes as well as treatment planning for both resection and RF ablation.¹ With advanced capabilities, you can complete an entire case in one review and one session, from one chair. Access your applications virtually anywhere instead of waiting for a particular workstation to become available.

#### **Enhanced reporting**

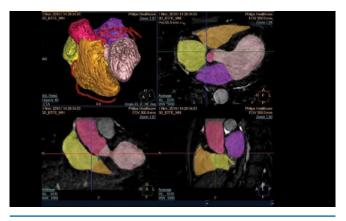
Augment your clinical reports with easily exportable graphs and tables which can be collated into a single patient report. Store this and key annotated images right on your PACS or RIS.





#### Multi Modality Advanced Vessel Analysis (AVA)

Zero-click bone removal helps you focus on vascular stuctures. Automatic Series Creation TM creates cMPR and volume images even before you open the study.



#### MR Cardiac Whole Heart

Within seconds, the fully automated segmentation tool transforms the heart into individual segments.

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diagnosis

<sup>&</sup>lt;sup>1</sup> 50% faster: measured in a comparison between semi-automated IntelliSpace Portal CT Liver Analysis software and non-automated software (Mokry T et al. 2012)

# One solution for today... and tomorrow

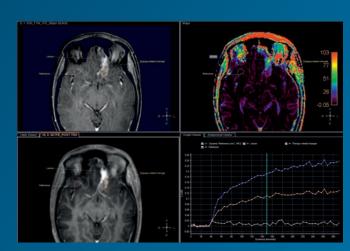
Advanced analysis is changing rapidly, and so is the IntelliSpace Portal. To continually provide the best care with maximum proficiency, you need access to the latest applications. Comprehensive Philips RightFit and service agreements make it simple. They keep you connected to a steady stream of innovations that enable you to expand your clinical capabilities year after year. Workflow optimization consulting, clinical education, and training services show you how to make the most of your solution from the start. And rapid telephone and remote assistance is just a call away. Select the exact number of users you need, and grow them as you grow.



- CT Pulmonary Artery Analysis\* and CT COPD
- Multiple application enhancements
- Philips Allura Interventional Suite integration
- iXR and DXR viewing
- Enhanced reporting and integration
- VMware ready
- New Ultrasound applications
- MR complete cardiac and neurology package
- Ultrasound viewing capability and clinical applications
- NM NeuroQ Amyloid Analysis
- Multi Modality Tumor Tracking
- NM Processing Applications Suite

IntelliSpace Portal 6 **2013**  IntelliSpace Portal 7.0 **2014** 

IntelliSpace Portal v5 **2012** 



#### **MR Permeability**

Customer feedback resulted in various improvements to provide an enhanced overview of the leakage modeling.

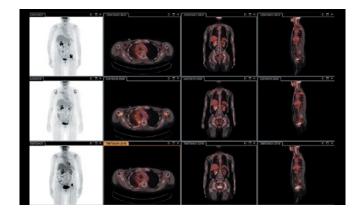
#### Innovation and you

The IntelliSpace Portal delivers the latest clinical advances and enhanced, world-class applications year after year. To help us deliver and enhance clinically rich applications, customer feedback is essential. You are integral to this development process. Your insights drive the innovations we can offer you tomorrow because this is a solution which evolves continuously.

<sup>\*</sup> Not available for sale in the US

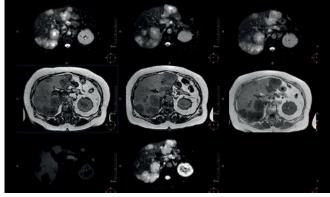
## Multiple modalities, one robust toolset

Review and analyze images from multiple modalities in a single, easy-to-use viewer. Get the full picture on your patient using multiple 3D tools to quantify and measure disease states, incorporating data from CT, MR, and other modalities.



#### **Multi Modality Viewer**

Get a multi-modality display of CT, MR, MI, US, iXR, and DXR datasets. Proprietary technology streams display to the client device over a LAN, WAN, or any broadband Internet connection through your hospital's VPN.



#### **Multi Modality Tumor Tracking**

Monitor tumor progression or remission over time, evaluating response to therapy using sequential PET/ CT, SPECT/ CT, MR, and CT. Major enhancements include a new one-click lesion segmentation tool and a user-configurable edit tool bar properties dialog and table to manage lesions. The results table now contains separate parts, and you can copy and paste it into any standard document with a single click.

#### IntelliSpace Portal multi-modality applications

- Multi Modality Advanced Vessel Analysis (AVA) Stenosis
- Multi Modality Tumor Tracking
- Multi Modality Viewer
- DXR Viewing (in MMV) **♦** iXR Viewing (in MMV)
- · US Viewing (in MMV)

#### Collaborate in real time

Speed your time to diagnosis thanks to tools that make it easy to work together. Share bookmarks and results, and transfer studies hassle-free. Enjoy access to your studies virtually anywhere with Web Collaboration\*. It turns any mobile device into a true multi-modality viewer, so you can examine CT, MR, MI (molecular imaging), and US images from just about anywhere you choose.

For more information on these multi-modality applications, please contact your local Philips representative or refer to the latest IntelliSpace Portal data sheet.

Enhanced application
 New application



#### **Application Highlight**



#### Multi Modality Advanced Vessel Analysis (AVA)

#### Reduce comprehensive cardiovascular analysis planning to five minutes

Take advantage of multiple presets and user-defined options to reduce comprehensive vascular analysis planning to five minutes. Simplified bone removal and visualization tools provide exceptional 3D visualization while additional automatic tools can

- Examine and quantify vascular lesions from CTA and MRA studies
- Accommodate different modes of inspection and label different vascular lesions
- Reduce the time to produce end results with automatic creation of cMPR, cross-sectional, MPR, extracted centerlines, and volume images created even before you open your study
- Get superb visualization of vascular structures with simplified zero-click bone removal and visualize the carotid siphon with
- Enhance workflows for specific findings creation, like Stenosis, Aneurysm, and Diameter measurements with customizable views

#### **Speed up** workflows by 77%

Multi Modality Advanced Vessel Analysis (AVA) reduces the manual time-to-results by 77% for neuro (head/neck) and body CT angiography (CTA) exams.\*2



Manual procedures

Multi Modality Advanced Vessel Analysis (AVA) with ASC

- \* Compared to the Philips EBW v4.x workstation
- <sup>2</sup> Kadavigere, R., Maiya, M., Rao, V., Read, K. Standardized Results of CT Angiography Obtained with Automated Postprocessing Using a Dedicated Server: A Workflow Optimization Study. A collaboration of Philips Healthcare and Kasturba Medical College at Manipal University, India. Radiological Society of North America 2011 Scientific Assembly and Annual Meeting, November 26 - December 2, 2011, Chicago IL.

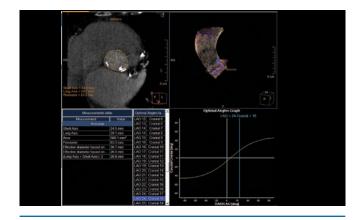


<sup>\*</sup> Web Collaboration enables viewing and sharing with tablets and smart phone devices - not intended for diagnosis

# Cardiovascular applications

#### Expanding your view of the heart and blood vessels

Diagnose, and monitor cardiovascular diseases with increased confidence. New Ultrasound applications, the ability to monitor functional flow reserve with enhanced MI applications, and multiple enhanced applications give you a broad set of analysis options. 3D models, maps, and other quantitative tools offer quick and effective analysis support, boosting diagnostic confidence.



#### **CT TAVI Planning**

Quickly assess the aortic root anatomy for pre-TAVI planning with this non-invasive semi-automatic application. Obtain crucial information about eligibility, proper device size, and a recommendation for C-arm angle for device deployment.

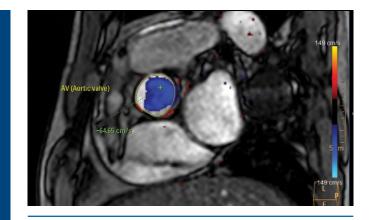


#### CT Comprehensive Cardiac Analysis (CCA)

Automatically extract and visualize the entire coronary tree with automatic, model-based whole heart segmentation and zero-click coronary artery segmentation. CT-MI MPI Fusion loads the CT and resulting MI data at the same time.

Cardiac MR and CT together [on Philips IntelliSpace Portal] have lowered overall analysis time by 20%-30%."

Dr. Gaby Weissman, M.D. MedStar Washington Hospital Center, Washington, D.C., USA



#### **MR QFlow**

Get overlays with 2D color flow maps on anatomical references, for example, and use automatic vessel contour detection. You can bookmark the entire review for later use or for communication with other physicians.



#### One step closer to treatment

Bring advanced diagnostic imaging closer to the interventional suite by integrating your Allura Interventional Suite with the IntelliSpace Portal.

Put an end to multiple patient searches. The unique interventional X-ray integration automatically retrieves patient data on the IntelliSpace Portal for your scheduled patients.

#### IntelliSpace Portal cardiovascular applications

- Multi Modality Advanced Vessel Analysis (AVA) Stenosis
- · CT Advanced Vessel Analysis Stent Planning
- · CT Cardiac Viewer
- CT Comprehensive Cardiac Analysis
- · CT-MI Cardiac Fusion
- CT Calcium Scoring
- · CT Cardiac Plaque Assessment
- CT TAVI Planning
- · CT EP Planning
- CT Dynamic Myocardial Perfusion (DMP)
- · CT Myocardial Defect Assessment
- MR Cardiac
- MR Cardiac Temporal Enhancement
- MR Cardiac Whole Heart
- MR QFlow NM Review
- NM Astonish Reconstruction
- NM Processing Application Suite

- Cedars-Sinai Cardiac Suite 2013
- Corridor4DM V4.0 2013
- NM Emory Cardiac Toolbox 2013 (ECTb)
- US Viewing (in MMV)
- US Q-App Vascular Plaque Quantification (VPQ)
- US Q-App Intima Media Thickness (IMT)
- · US Q-App General Imaging 3D Quantification (GI 3DQ)
- Multi Modality Viewer

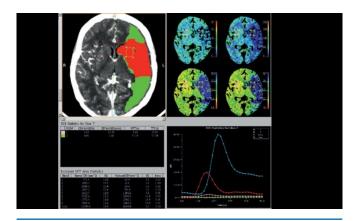
For more information on these cardiovascular applications, please contact your local Philips representative or refer to the latest IntelliSpace Portal specifications sheet.

Enhanced application • New application

## Neurology applications

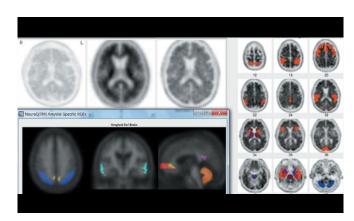
#### Bringing insight to the body's most complex organ

Neurological cases can be challenging – especially strokes, where "time is brain." Comprehensive applications help you assess recoverable tissue quickly and easily with enhanced applications like iMR IViewBOLD which allows you to visualize brain activation maps. This rich suite of tools also helps you evaluate neurological degenerative diseases by, for example, analyzing FDG and amyloid uptake.



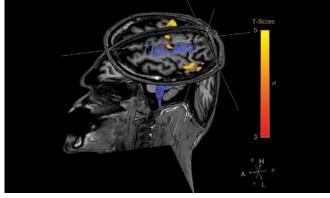
#### **CT Brain Perfusion**

Identify areas of salvageable tissue in acute stroke patients using reduced summary maps. Traffic lights offer an extra measure of diagnostic confidence – especially helpful in time-critical treatment decision. Further assess risks using enhancements that visualize regions of higher collateral.



#### **NM NeuroQ**

Analyze the distribution of FDG and Amyloid PET tracers in individual scans as well as differences between two PET scans on the same patient. Uptake values are automatically calculated to assist in the final interpretation of the images.



Visualize white matter connectivity in the brain using task guidance for generating common or user-defined tracts. Detailed examples are used to guide you for the various tracts. Visualization includes overlays, such as with functional maps. Use bookmarks to save any (intermediate) view of the package on a dataset.

### Your evolving view in neurology

Key enhancements in this neurology applications suite are aimed at increasing confidence. In addition to the Traffic lights on CT Brain Perfusion, other applications offer built-in features to support your diagnosis. MR SpectroView, for example, includes clinically driven protocols and quality indicators, while MR FiberTrak provides guidance for fibertrak tracts. What's more, three key modalities – CT, MR, and MI – are available on the same platform.

#### **IntelliSpace Portal neurology applications**

- Multi Modality Advanced Vessel Analysis (AVA) Stenosis
- CT Brain Perfusion
- · CT Body Perfusion
- MR Diffusion
- MR T2\* (Neuro) Perfusion • MR FiberTrak
- MR IViewBOLD
- MR SpectroView
- MR Permeability
- NM Review
- NM NeuroQ\*
- NM NeuroQ EQuAL\*\*



**66** IntelliSpace Portal has completely changed - for the better - how we approach advanced visualization and analysis."

> Dr. Ilan Shelef, M.D. Soroka Medical Center

For more information on these neurology applications, please contact your local Philips representative or refer to the latest IntelliSpace Portal

- \* More information on these two applications is available in the specifications sheet.
- \*\* NeuroQ and EQuAL are trademarks of Syntermed.
- Enhanced application New application

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## Oncology applications

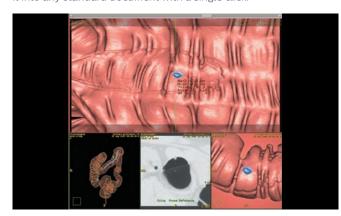
#### Manage complex cases with robust tools

Cancer patients require constant vigilance. The IntelliSpace Portal provides superb tools to help you evaluate the stage and treatment response at multiple time points. Advanced 3D and graphical tools help you manage the entire oncology patient cycle from diagnosis to treatment response evaluation.



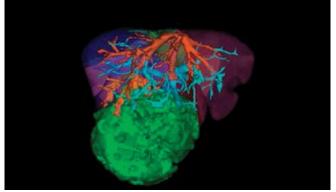
#### **Multi Modality Tumor Tracking**

Monitor tumor progression or remission over time, evaluating response to therapy using sequential PET/ CT, SPECT/ CT, MR, and CT. The automatic registration and new one-click lesion segmentation tool makes it easy and quick to compare multiple studies to monitor therapy response and tumor progression. The results table contains separate parts, and you can copy and paste it into any standard document with a single click.



#### **CT Virtual Colonoscopy**

Exclusive to Philips, this application allows you to perform a "virtual dissection" of the colon by unfolding or unrolling along the centerline and displaying a portion of the colon for inspection, providing a 100% view of the surface of the colon with no image manipulation



This application automatically identifies the liver before semiautomatically segmenting it. Liver segments can now be created and viewed during the seed point placement process. Results tables are almost always displayed automatically, and you can directly copy them to your clipboard and reporting system.

#### Focus on image analysis - not the process

Today's oncology patients are living longer – and require more follow-up scans. How do you work productively when you need to accomplish more every day? Key enhancements in oncology applications like workflow automation and automatic segmentation, complete with a suite of adjustment tools, can help. IntelliSpace Portal oncology applications are designed to deliver outstanding image quality, giving you a broad view of your patient along with disease anatomy and its properties plus the ability to remove non-target tissue. Share results efficiently with referring physicians and tumor boards using tools such as bookmarks or our Web Collaboration option.

#### **IntelliSpace Portal oncology applications**

- Multi Modality Tumor Tracking (MMTT)
- Multi Modality Viewer (MMV)
- CT Virtual Colonoscopy
- CT Liver Analysis
- CT Lung Nodule Analysis CT Body Perfusion
- MR Diffusion
- MR T1 Perfusion
- MR Permeability
- MR Subtraction MR Spectroscopy
- NM Review
- NM Processing Application Suite
- · US Q-App General Imaging 3D Quantification (GI 3DQ)
- US Q-App Region of Interest (ROI)
- US Q-App MicroVascular Imaging (MVI)
- US Q-App Elastography Analysis (EA)\*
- US Q-App Elastography Quantification (EQ)\*\*



66 Multi Modality Tumor Tracking works the way I do and gives me the tools I need to do my job, which is, simply stated, find the lesion, measure it, and follow it."

> Dr. Stephen Raskin, M. D., Sheba Medical Center

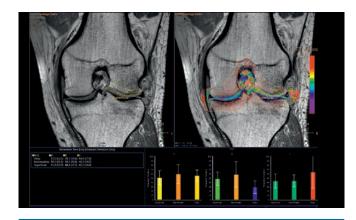
For more information on these oncology applications, please contact your local Philips representative or refer to the latest IntelliSpace Portal specifications sheet.

- \* For sale only in the US
- \*\* Not for sale in the US
- Enhanced application New application

## Orthopedics

#### Complicated assessments made easy

Due to an aging population as well as increases in obesity and sports activity, joint surgeries are on the rise. Perform a wide variety of tasks, such as assessment and reconstruction, quickly and easily thanks to the rich orthopedics application suite on the IntelliSpace Portal. They're designed for even the most challenging musculoskeletal cases.

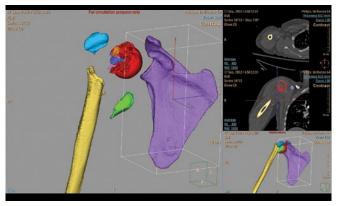


#### **MR Cartilage Assessment**

Perform a complete review of the source data, verify registration and time intensity changes, and generates all types of output with or without the use of an Arterial Input Function (AIF).

#### Your evolving view in orthopedics

Key enhancements in this orthopedics applications suite allow you to take a closer look at cases involving bone and cartilage. CT Acute MultiFunctional Review, for example, includes an MSK and surgical planning stage. CT Bone Mineral Analysis, previously only available on Philips Extended Brilliance Workspace, helps you track and manage degenerative and metabolic bone diseases.



#### CT Acute MultiFunctional Review (AMFR)

Read trauma cases within one comprehensive post-processing application to diagnose trauma patients scanned with CT. It includes four stages of assessment, such as an MSK and surgical planning stage as well as an auto-spine stage, which automatically generates multi-planar reformatting along the spinal cord and disk spaces.

#### **IntelliSpace Portal orthopedics applications**

- $\cdot \ \mathsf{CT} \ \mathsf{Acute} \ \mathsf{MultiFunctional} \ \mathsf{Review}$
- · CT Bone Mineral Analysis
- · MR Cartilage Assessment
- · MR Echo Accumulation
- US Viewing (in MMV)

#### For more information on these orthopedics applications, please contact your local Philips representative or refer to the latest IntelliSpace Portal specifications sheet.

# Pulmonary and Emergency Care

#### Exceptional tools to aid in rapid response and treatment planning

The IntelliSpace Portal is designed to accommodate your growing needs in an ever-expanding range of cases including pulmonary and polytrauma cases as well as requisite CT scans. CT Acute MultiFunctional Review, one of our advanced emergency care applications, allows you to remain within one application when diagnosing trauma patients scanned with CT.



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#### CT COPD

CT COPD helps quantifiably track the destructive process of diffuse lung disease and localize specific areas. Automatically segment both lungs to determine total lung volume (cc), diseased lung volume (cc), and percentage of affected lung. Segment the airway tree, attain centerlines, and measure airway parameters.



#### CT Acute MultiFunctional Review (AMFR)

Read trauma cases within one comprehensive post-processing application to diagnose trauma patients scanned with CT. It includes four stages of assessment.

#### CT Pulmonary Artery Analysis\*

A comprehensive tool for pulmonary embolism detection, this application includes manual and automatic tools which provide outstanding visualization of the lung and allow you to calculate heart chamber volumes.

#### IntelliSpace Portal emergency care applications

- CT Acute MultiFunctional Review can be combined with:
- CT Brain Perfusion, MR Diffusion, and MR T2\* (Neuro)
   Perfusion for acute stroke cases
- CT Comprehensive Cardiac Analysis for acute chest pain cases

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- Multi Modality Advanced Vessel Analysis (AVA) for
- comprehensive vascular analysisCT Calcium Scoring for quantification of coronary artery calcifications
- US Viewing (in MMV)

#### **IntelliSpace Portal pulmonary applications**

- CT Pulmonary Artery Analysis\*
- CT COPD
- · CT Lung Nodule Assessment
- CT Calcium Scoring
- Multi Modality Tumor Tracking (MMTT)

For more information on these pulmonary and emergency care applications, please contact your local Philips representative or refer to the latest IntelliSpace Portal specifications sheet

\* Not available for sale in the US

## Working as one with your hospital

Every year, you have more advanced clinical imaging options to choose from. New technologies are introduced at an ever-increasing pace. And the IT landscape is evolving just as quickly.

The IntelliSpace Portal turns this change into an advantage – and helps your enterprise realize the full potential of advanced visualization and analysis. As a server-based, single license managed solution, it's easy to use, manage, and upgrade. Everyone works with the same software version, and all applications and licenses are handled in one solution. And one RightFit Service

Agreement keeps you up to date with the clinical, workflow, and IT advances of your IntelliSpace Portal. As your hospital grows, you can add modalities and clinical applications as well as specify the exact number of users you need over time, while keeping your advanced analysis solution consistent. The IntelliSpace Portal doesn't just continuously evolve – it evolves as you do.



## Working as one across your network

#### Scale up when you need it

Although patients may receive care at different points in your network, you can conduct your analysis at a single point: your monitor of choice. The IntelliSpace Portal Enterprise connects with multiple servers – either at different sites or at a single site - to provide one unified view of patients throughout their journey.

Engineered to handle even wide-ranging and complex healthcare delivery networks, the IntelliSpace Portal is based on centralized management. IT teams can concentrate on maintaining flows of information to wherever you are because users, configurations, and licenses are managed all in one place through a convenient dashboard. Monitor your entire IntelliSpace Portal solution from one dashboard to review performance.

#### Manage schedules more efficiently

It can be difficult to predict when and how many different specialists in your enterprise need to use different applications. As a scalable solution, the IntelliSpace Portal Enterprise helps reduce some of that resource planning complexity, both at individual and across multiple sites. It quickly and easily adapts when more users and sites come online without interrupting your busy workflows.

You can even access multiple applications at once. Since the IntelliSpace Portal Enterprise calculates data and server loads to route to the most suitable server available at that time, you'll enjoy the same fast and simple access to images no matter how many of colleagues are online.

#### Leverage virtualization

Boost your system's performance by using your existing hardware as often as possible and increasing its flexibility. The IntelliSpace Portal now offers a software-only model that allows the solution to be deployed in your IT infrastructure

VMware certification enables IntelliSpace Portal to run server or client side virtualization in customer or Philips-owned equipment The IntelliSpace Portal is now Citrix®-ready, which allows the solution to run on server-side virtualization. It's deployed throughout your enterprise using a virtualized client application.

#### Systems in sync

The IntelliSpace Portal integrates with your RIS and EMR with the ability to export a patient report, including tables and graphs. Want to start pre-fetching priors based on today's or tomorrow's list of patients – or obtain rich patient demographics? The IntelliSpace Portal supports this by receiving HL7 order information. Clinicians reading exams with the IntelliSpace Portal can even launch the patient context patient context from the EMR.

#### Licensing to fit your enterprise

User-based licensing for the IntelliSpace Portal works to enhance your investment in your existing systems. Match the needs of your enterprise with the amount of users who must use the IntelliSpace Portal concurrently. Multiple users per site may access the system with access to the full range of installed applications.







Find out more about Philips IntelliSpace Portal

Printed in the Netherlands www.philips.com/intellispaceportal

4522 991 06231 \* NOV 2014