

Visión de inteligencia artificial integrada en el flujo de trabajo de radiología.



Raúl Pérez / Santos López

Enterprise Informatics

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innovation  you

XVI Jornadas APISA – 2023

HUMANIZACIÓN DIGITAL INTELIGENTE



¿Cuál es nuestro entorno actual?

Muchas presiones en las organizaciones sanitarias

Enhance remote collaboration around complex cases as oncology care



Automatizar los resultados de multiples aplicaciones en el informe para crear resultado precisos



All critical diagnostic areas (radiology, cardiology, pathology, and neurology) managed by a single application to support care pathways



Store all imaging and waveforms data in a single common and secure archive with a backup over the cloud to ensure security and availability, as well as superior scalability.



Crear un Marketplace para dar acceso a startups y a algoritmos propios desarrollados en hospitales



Partnership to co-develop clinical applications and technologies



Adapt report layout to the exam for better and easier reading

Philips and Artificial Intelligence

Integrating Artificial Intelligence into clinical workflows **to support confident decisions about the care pathway**. AI needs to be combined with a deep human understanding of the clinical and operational context. By being contextual, embedded and enhancing the user experience, AI offers a seamless, integrated and personal experience throughout the health journey.

Characteristics:

1. Enhances the people who use it
2. Adapts to the context
3. Embeds into people's workflow or daily environment

Health continuum





Massive

Pay per use

Elastic

Infinitely scalable

Muchos proveedores de Inteligencia Artificial

Muchos Sistemas de información

Un Doctor

Available
24/7

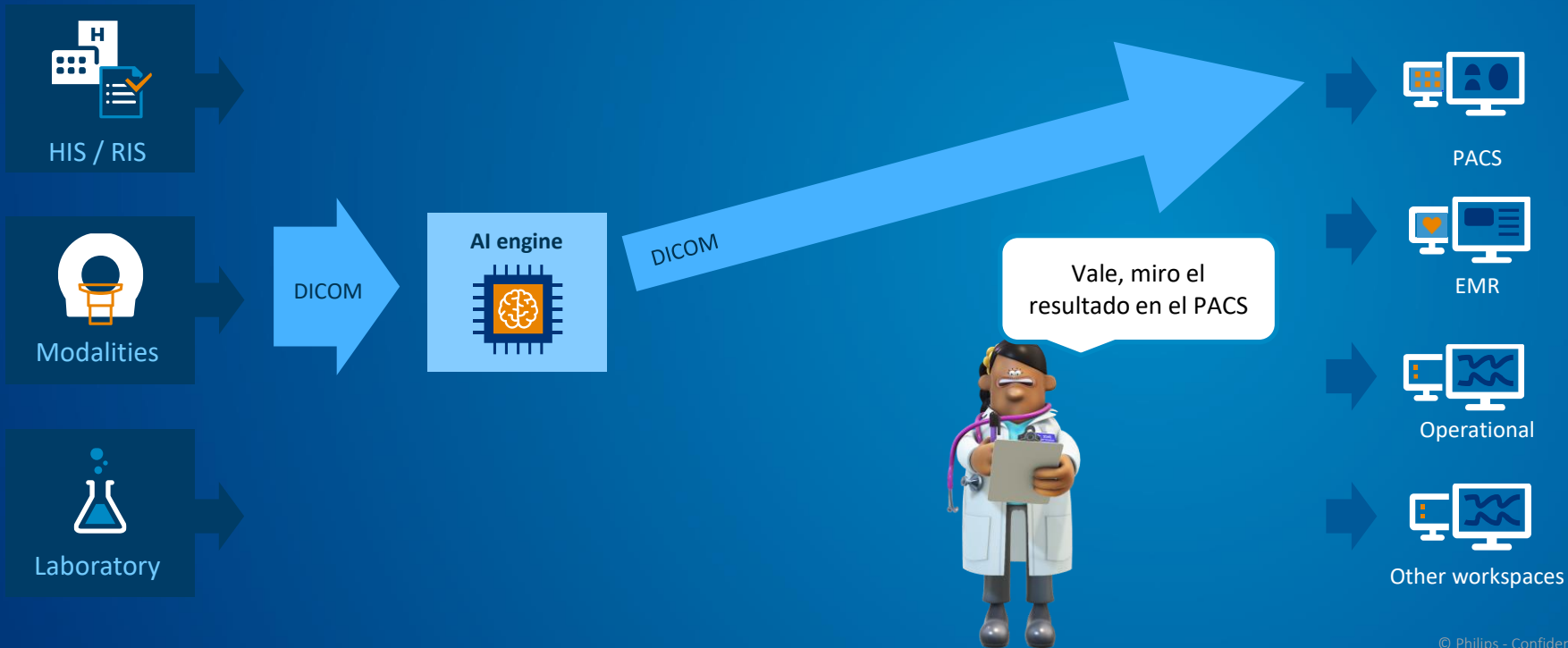
Houses vast
amounts of data

Drives value

Standard

Incorporación de multiples algoritmos de IA

Plataforma IA 1



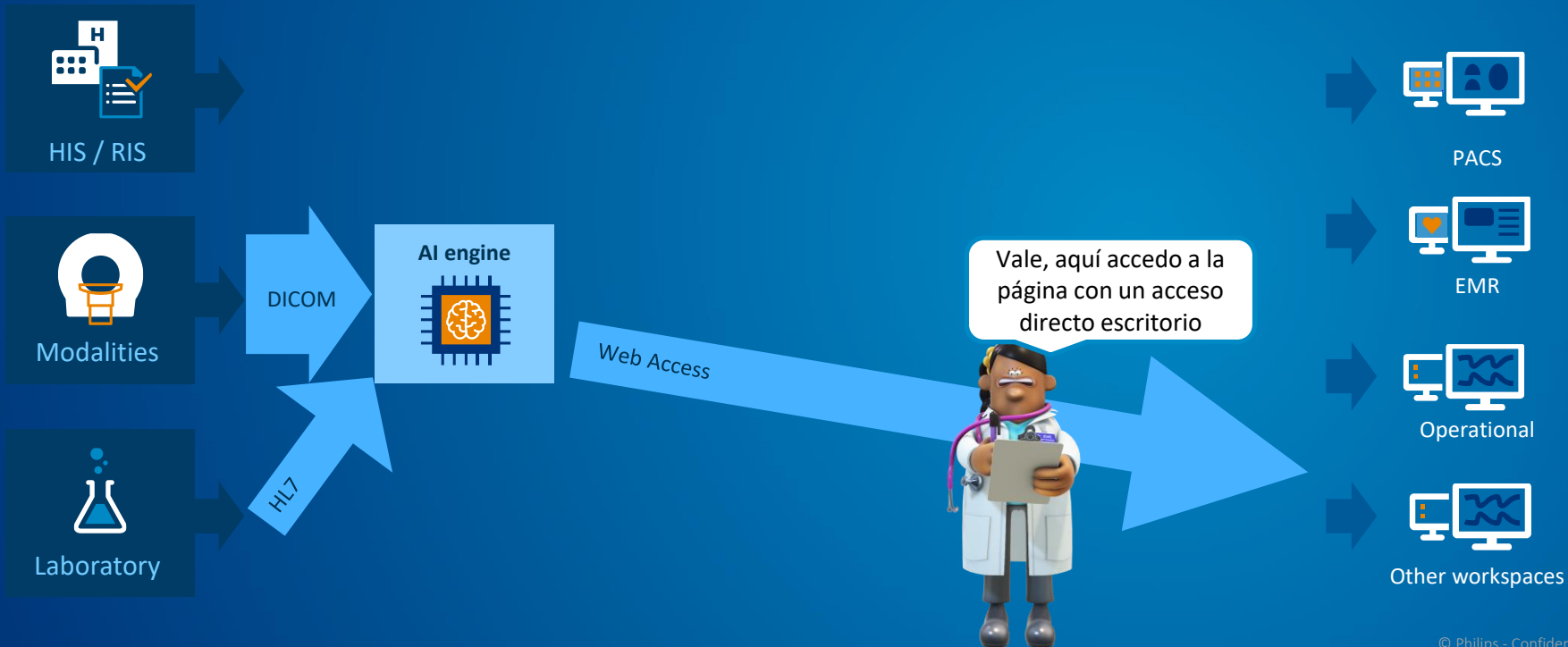
Incorporación de multiples algoritmos de IA

Plataforma IA 2



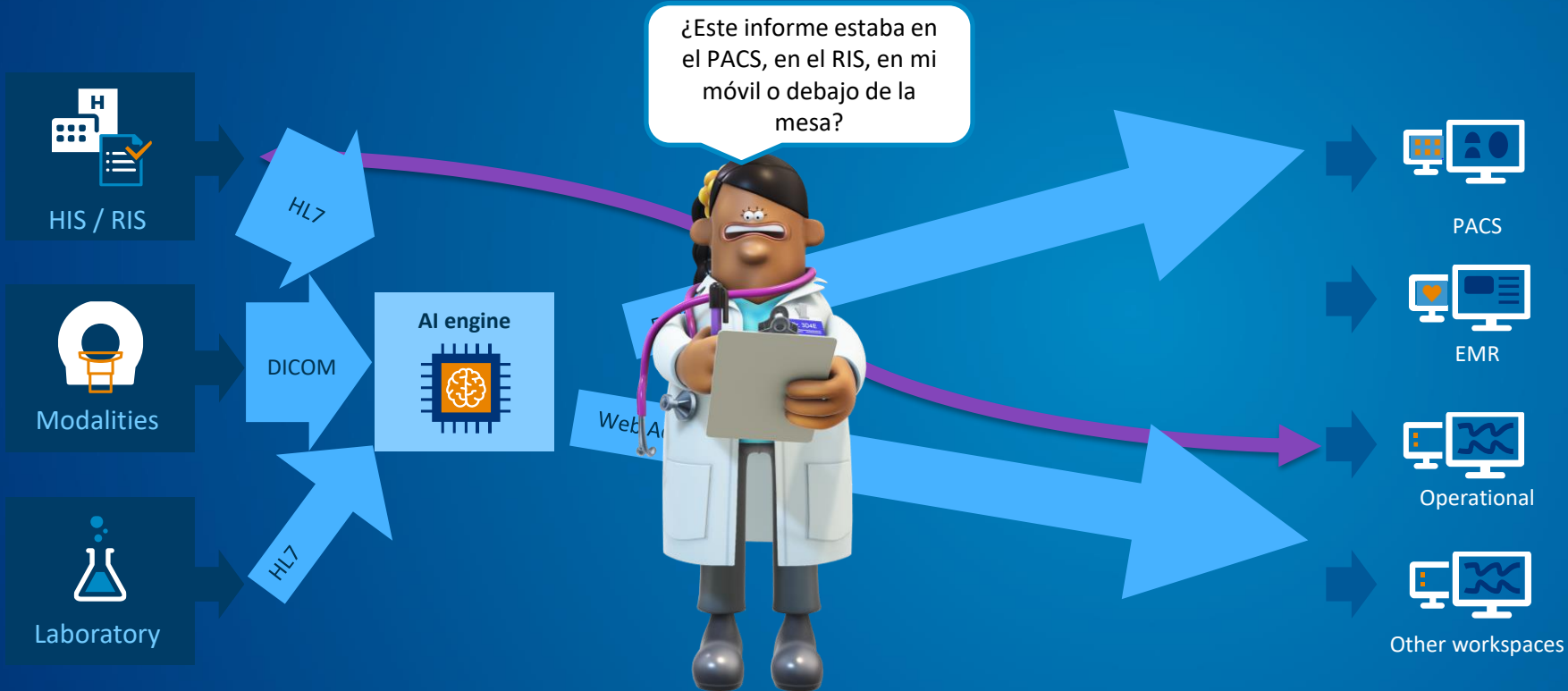
Incorporación de multiples algoritmos de IA

Plataforma IA 3



Incorporación de multiples algoritmos de IA

Plataforma IA ... n

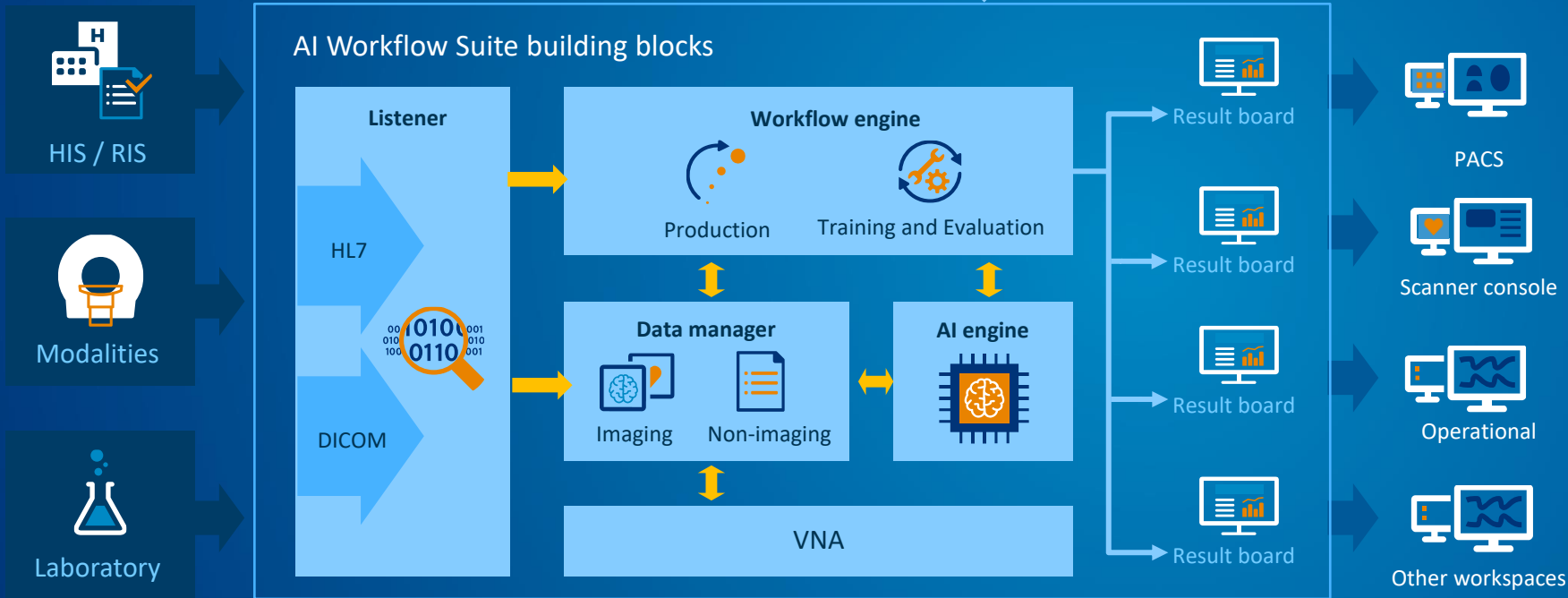




IntelliSpace AI Workflow Suite

AI platform

External AI models





Ejemplos reales

Integración de la IA dentro de los flujos de informado de imagen

Philips AI Manager sirve como un único punto de integración para ejecutar múltiples aplicaciones de IA en los datos del paciente para un apoyo al diagnóstico integral

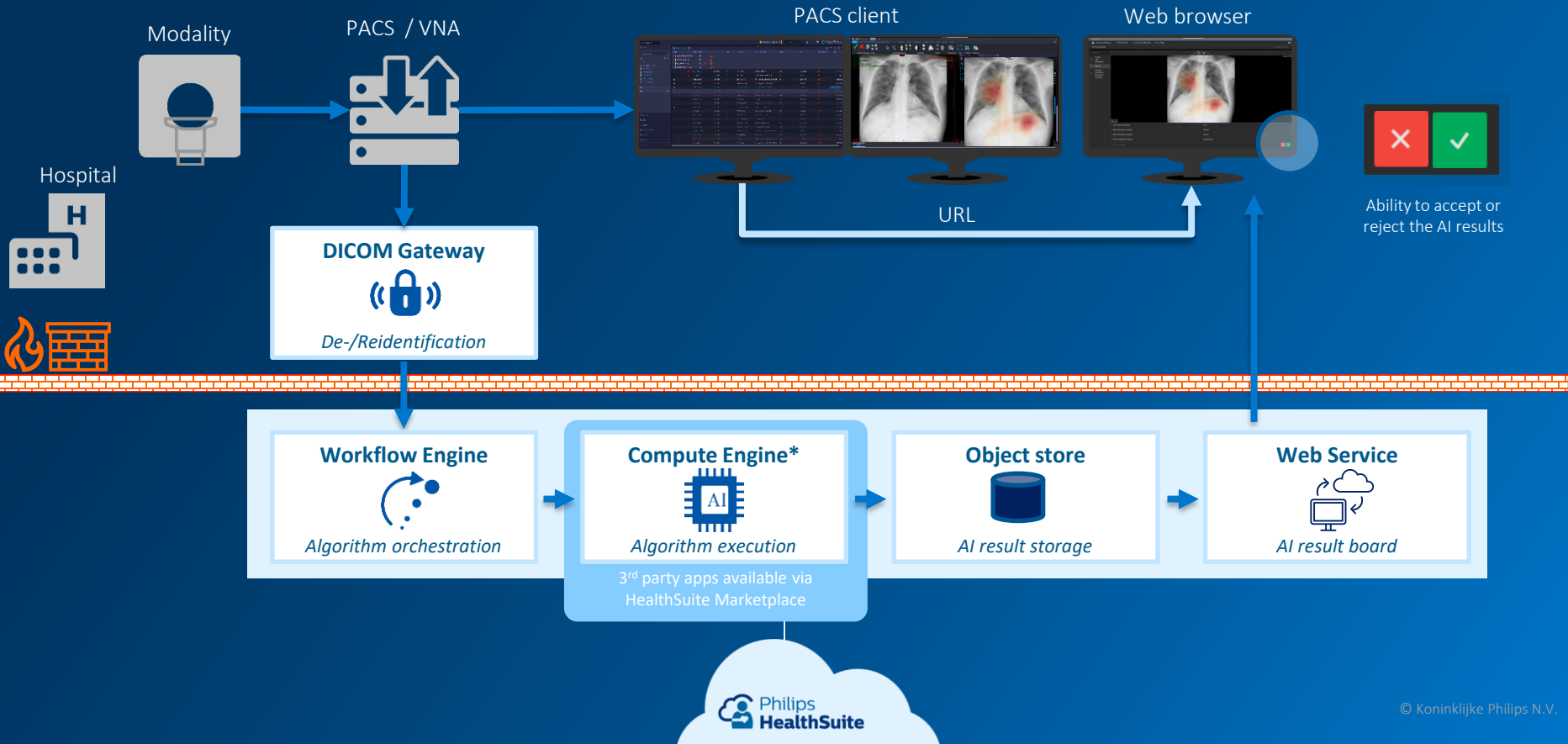
Description : Solitary lung nodule
AICertainty : 0.61
AICertaintyRange : 0.1
Creator : Annalise CXR 2.1
Exam Date : 10/14/2021 8:00:00 AM
Creation Status : Suggested
Name : B01
Type : General
Sub-Type : GSPS

GO TO OPEN



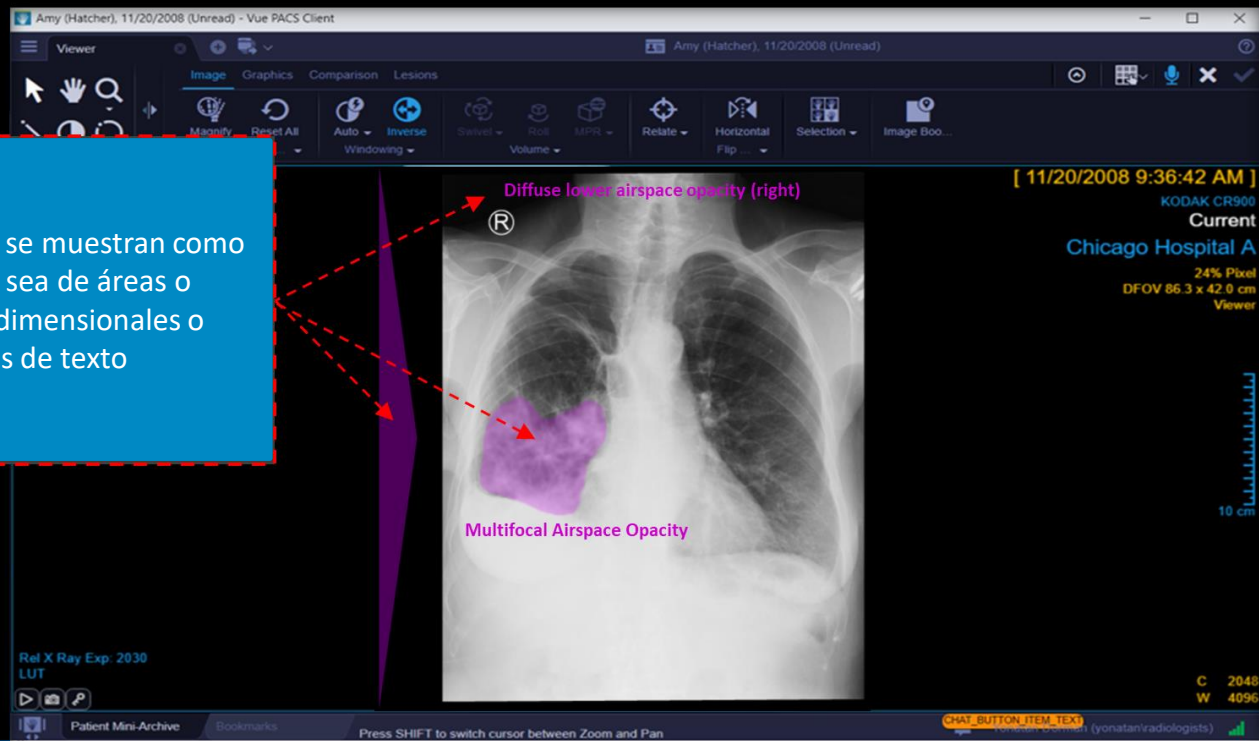
A row of four thumbnail images of chest X-rays. The first two thumbnails are labeled "(1 Img.)". The third thumbnail is labeled "GSPS Solitary Lung Nodule" and "901 PR (1 Img.)". The fourth thumbnail is labeled "Secondary Capture Annalise" and "902 (1 Img.)".

AI Manager workflow integration with your PACS



Seamless AI integration into Vue PACS

Los hallazgo de la IA se muestran como un marcador, ya sea de áreas o volúmenes bi/tridimensionales o anotaciones de texto



Seamless AI integration into Vue PACS

Estos marcadores pueden ser aceptados o rechazados por el radiólogo

The screenshot displays the Vue PACS Client interface. At the top, the window title is "Amy (Hatcher), 11/20/2008 (Unread) - Vue PACS Client". The main area shows a chest X-ray with a red dashed box highlighting a specific area. To the right of the X-ray, the following information is displayed: [11/20/2008 9:36:42 AM], KODAK CR900, Current, Chicago Hospital A, 24% Pixel, DFOV 86.3 x 42.0 cm, and Viewer. Below the X-ray, there is a table with the following data:

#	Description	Exam Date	Creation Status	Name	Type	Sub-Type
1	CXR Annalise	10/15/2018 9:55:00 AM	Approved	B01	General	Arrow

At the bottom of the interface, there is a "Confidential" watermark and a "CHAT_BUTTON_ITEM_TEXT" button with the text "(jonatan@radiologists)".

Seamless AI integration into Vue PACS

Los marcadores pueden incorporarse al informe

The screenshot displays the Philips Vue PACS interface. On the left, a sidebar contains navigation options like 'Archive Explorer', 'Worklist', and 'My Lists'. The main window is split into three panes:

- Report Pane (Left):** Shows a structured report for 'Sparks, Camille' dated 10/13/2021. The report includes:
 - PROCEDURE:** XR Chest.
 - CLINICAL INDICATION:** {rough}
 - TECHNIQUE:** PA view of the chest was obtained.
 - COMPARISON:** {ions}
 - FINDINGS:**
 - Lung fields: {the lungs are clear}
 - Cardiomediastinal: {the cardiomeastinal silhouette is within normal limits}
 - Pleural space: {no signs of pleural fluid or pneumothorax are see}
 - Osseous structures: {Inremarkable}
 - Soft tissues: {Inremarkable}
 - IMPRESSION:**
 - {no evidence for active cardiopulmonary disease}
- Image Pane (Center):** Displays a chest X-ray with a pink bracket highlighting a finding in the right lung. A context menu is open over the finding, offering actions such as 'Mark Graphics bookmark', 'Unmark Bookmark', 'Accept Bookmark', 'Reject Bookmark', 'Mark Graphics and insert bookmark', 'Define follow-up set', 'Copy', 'Properties', and 'Delete and Remove Bookmark'.
- Table Pane (Bottom):** A table listing AI findings with columns for 'Description', 'AICertainty', 'AICertaintyRange', 'Creator', 'Approv...', and 'Folds'.

Description	AICertainty	AICertaintyRange	Creator	Approv...	Folds
10/13/2021 8:14:00 AM, CR, CHEST (Current)					
Simple pneumothorax	0.8	0.05	Annalise CXR 2.1		



Triaje Automático, ayudando al flujo de trabajo para acelerar la detección de casos sospechosos

Esta solución permite llamar la atención del radiólogo, para reducir el tiempo de atención

o.philips.com/archive/

Night Shift

Flags	Patient Name	Age	Gender	Ref. Physician	Procedure Te
Stroke/Trauma (3 / 3)		🕒 3			
	Edwards, Elizabeth	59Y 6M	F	Evans David	CT Head w/o
	Ross, Fred	46Y 1M	M	Bl...	
	Valdez, Francisco	36Y 11M	M	R...	
ED/STAT (13 / 24)		🕒 3			
📍	Fischer, Lisa	85Y 7M	F	K...	
	Story, Susan	20Y 5M	F	E...	
	Gray, Judith	90Y 1M	F	B...	
	Simmonds, Dan	80Y 11M	M	E...	
!	Taylor, James	73Y 2M	M	M...	
!	Harris, Benjamin	61Y 3M	M	M...	
	Lewis, Sofia	51Y 7M	F	B...	
!	Wright, Chloe	20Y 6M	F	B...	
!	Lopez, Matthew	86Y 4M	M	K...	
	Hill, Lucas	44Y 5M	M	B...	
!	Ward, Jackson	53Y 6M	M	B...	

Chat

Today

I would like you to review the following case:
Patient name: Fischer, Lisa
Patient ID: 779246930740
Accession: 246930741

Please react asap to review this case

