



Augmenting imaging data with AI to bring precision therapies to Healthcare and Life Sciences

Jacques Gilbert
Senior Director of Healthcare Strategy, Nuance





80% of radiology reports
550,000 clinicians
worldwide

95% of top financial
services

50% of top retailers

9 of 10 telcos



\$15B cloud investment

92 countries

1billion daily users

\$1B invested in cybersecurity



**Together we want to
take-on some of the
big questions as we
all embark on a
Digital
Transformation...**

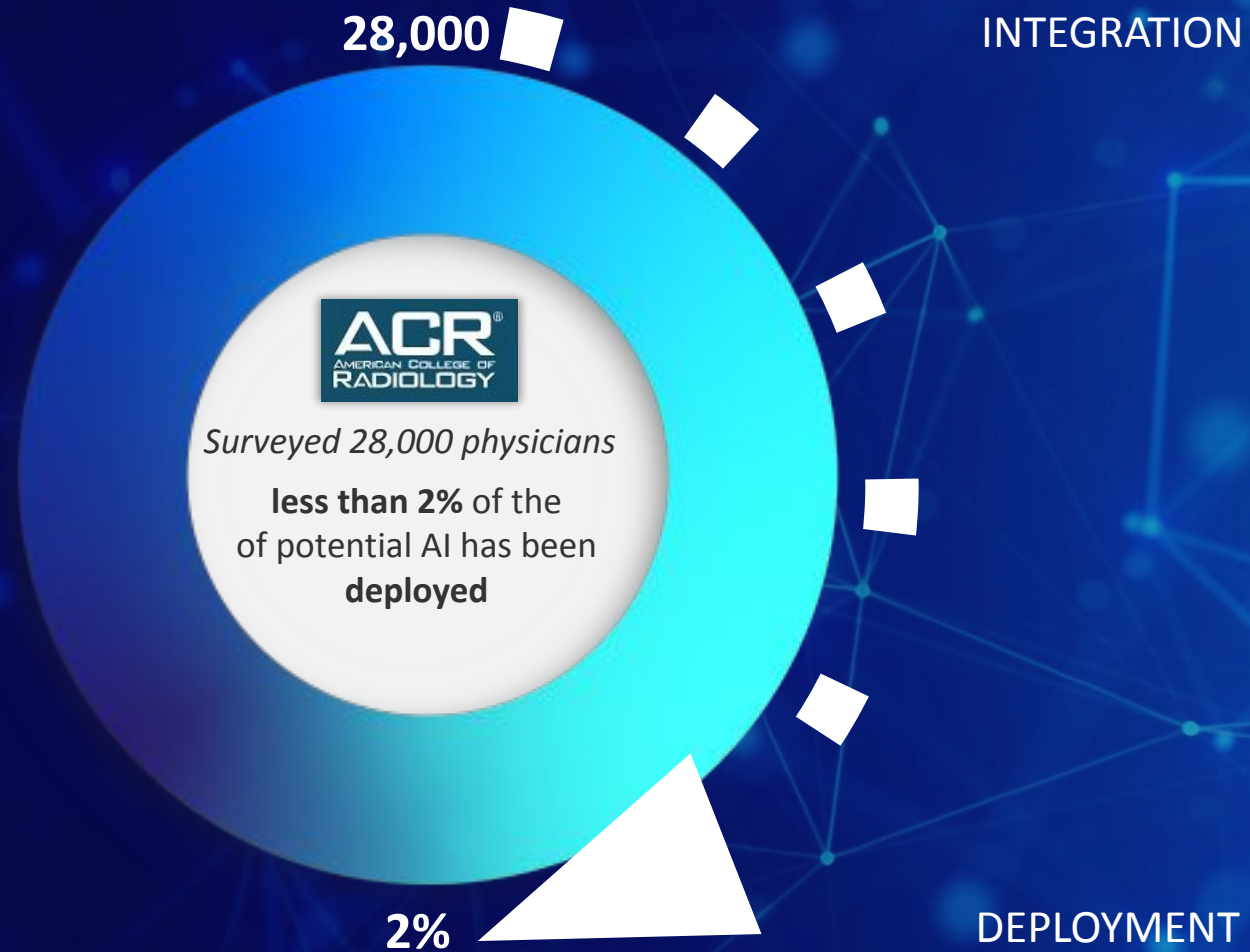
How can I fix my data silo's & migrate my data to the cloud?

How can I leverage my data to build high quality AI / ML models quicker?

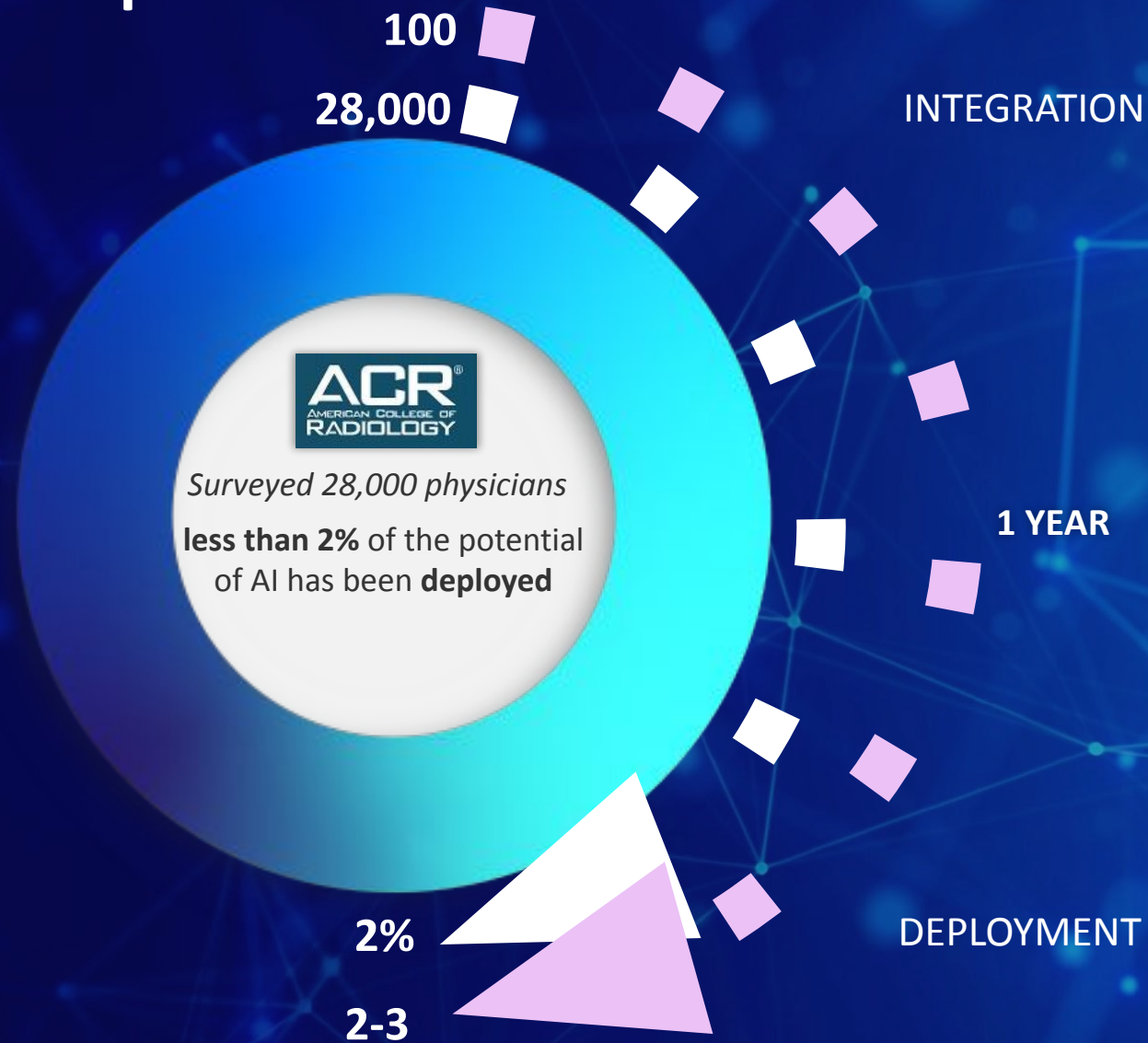
How can I deploy these AI models into the last mile workflow to drive better adoption and outcomes for patients?

Fix the deployment problem

The deployment problem?



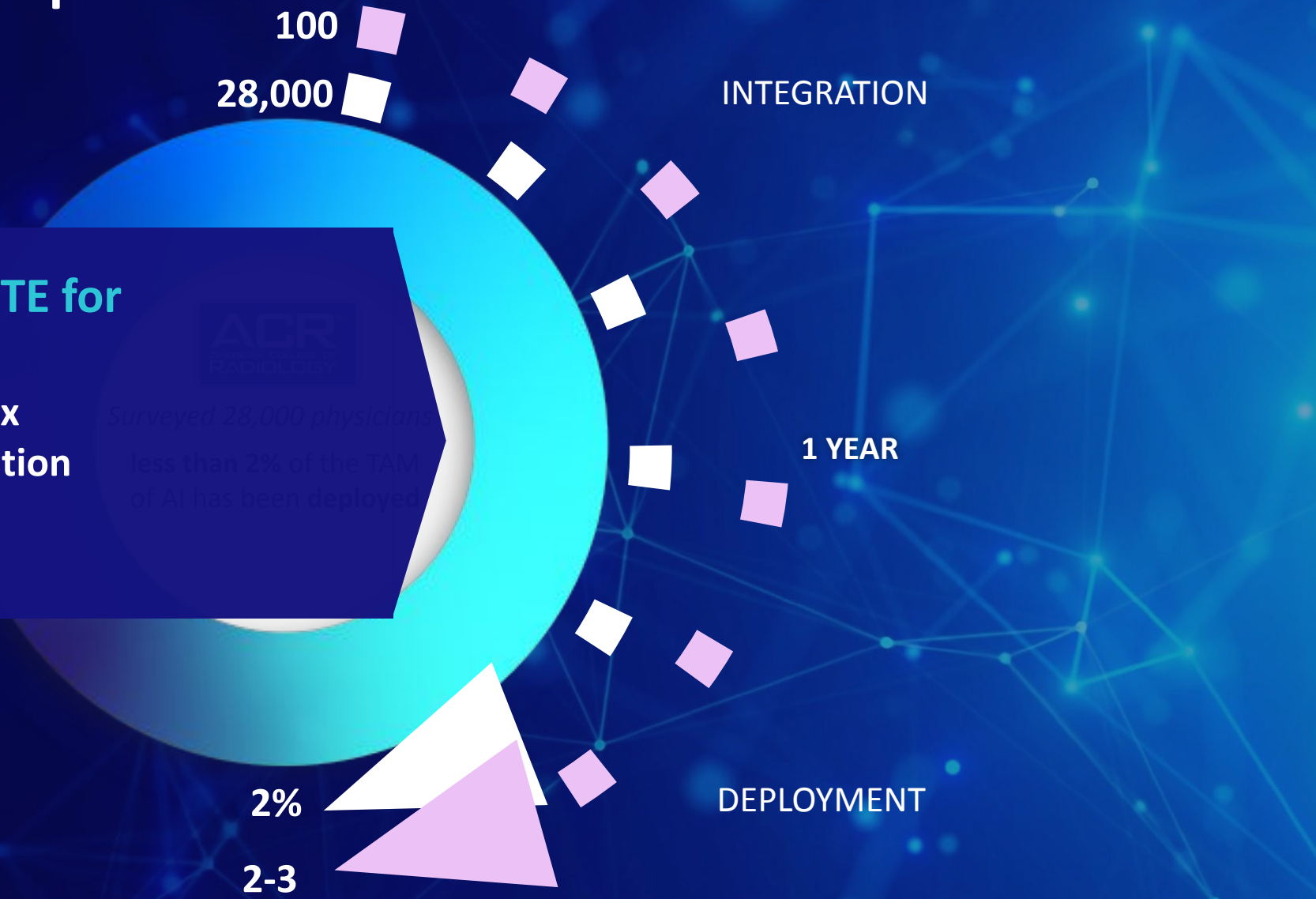
The deployment problem?



The deployment problem?

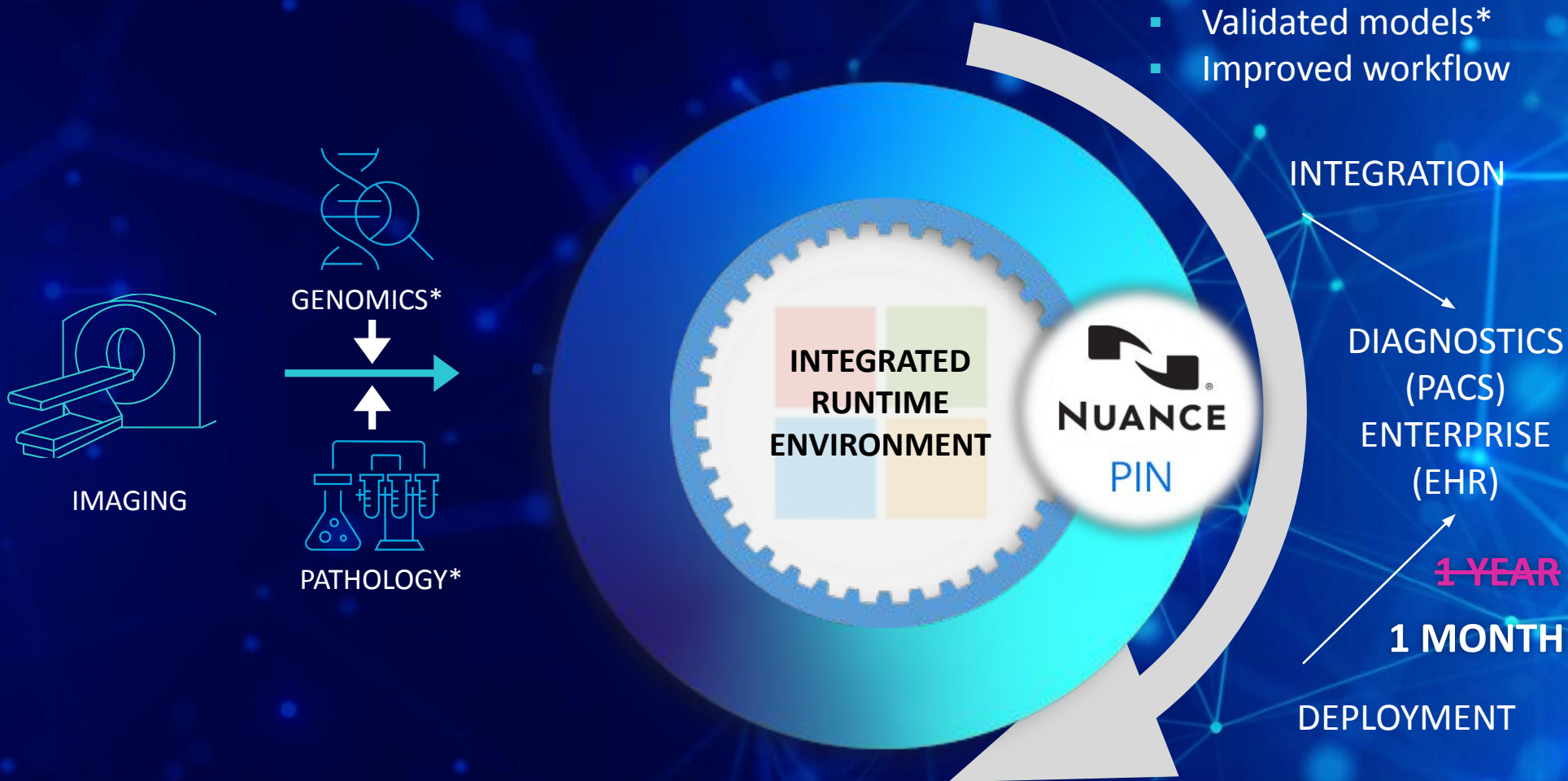
Need a comprehensive RTE for Healthcare AI

- Model onboarding complex
- Last mile workflow integration
- Data has no meaning
- No model monitoring



Surveyed 28,000 physicians
less than 2% of the TAM
of AI has been deployed

Fixing the deployment problem?



Future Development *

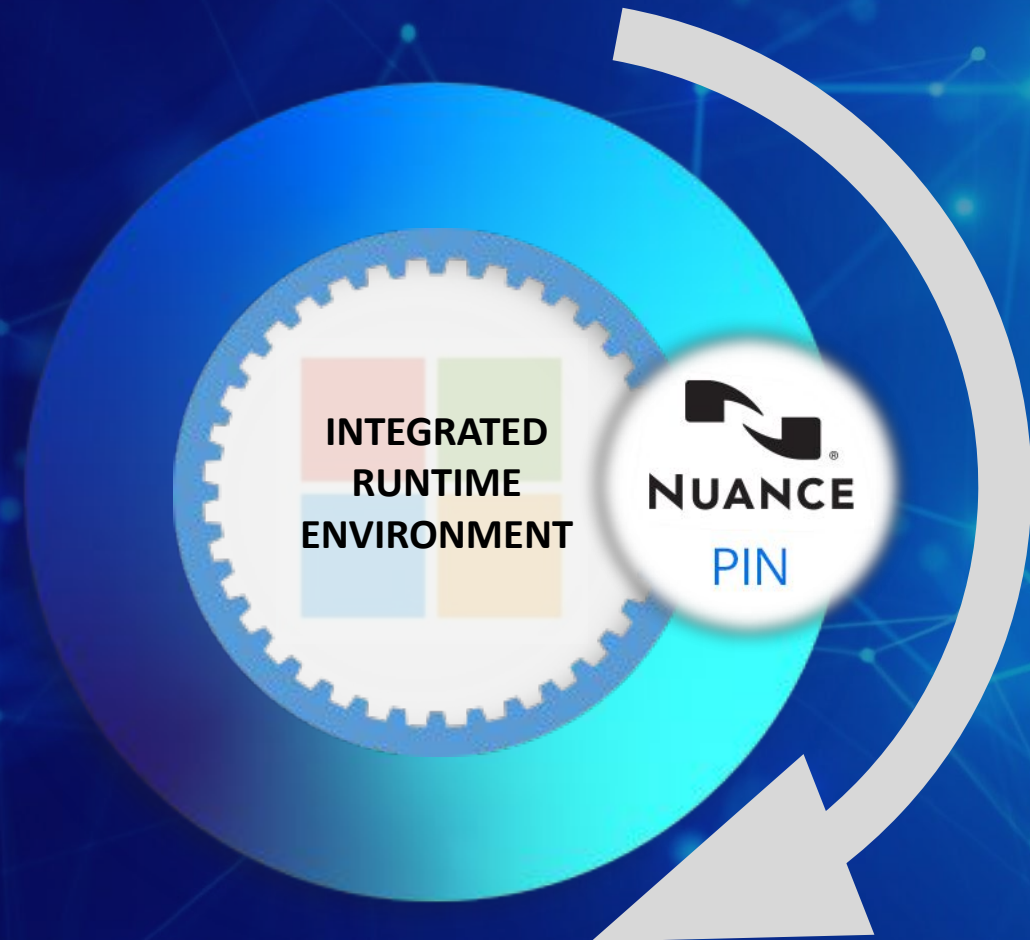
- Continuous monitoring*
- Real world evidence*

Fixing the deployment problem?

AI / ML Development Environments

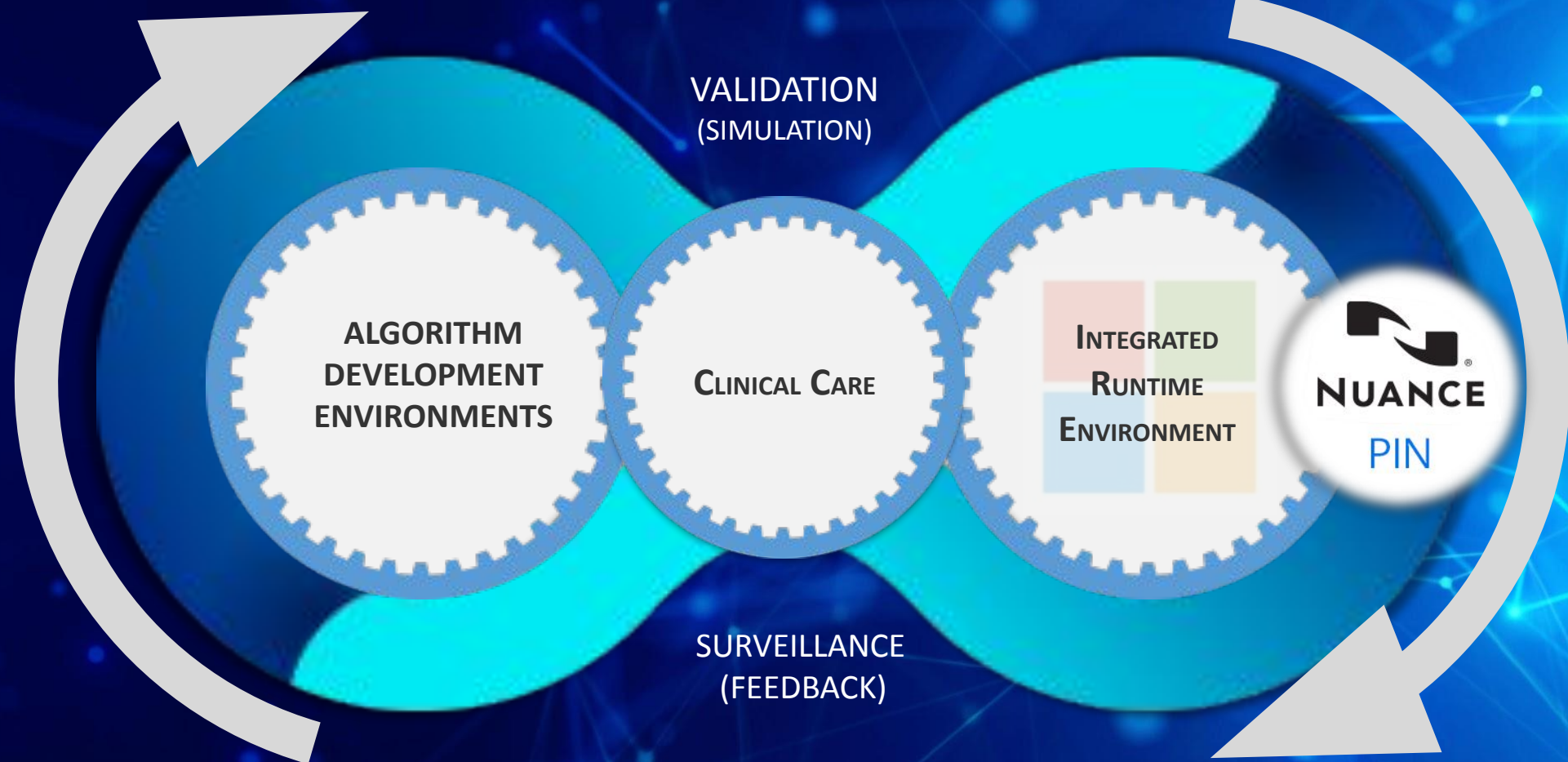


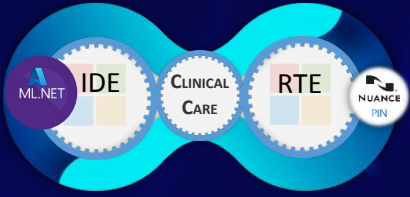
An integrated runtime environment



Integrated Development & Runtime environments

THE PRECISION IMAGING NETWORK

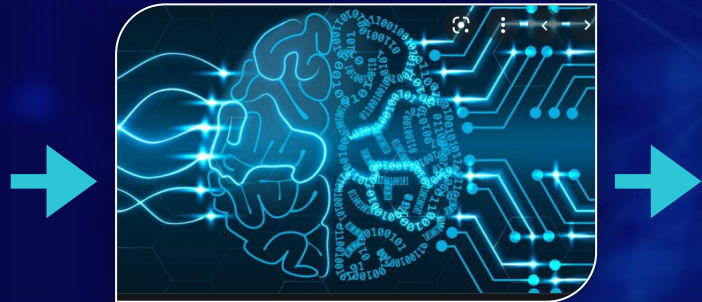
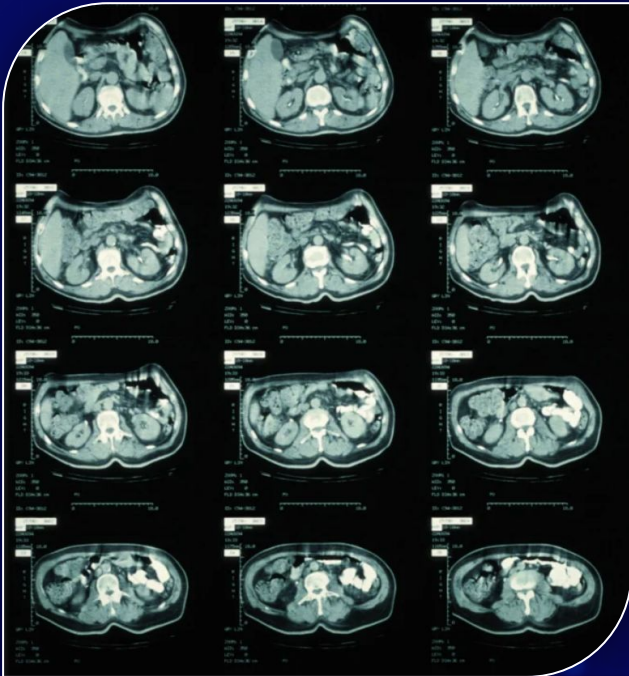


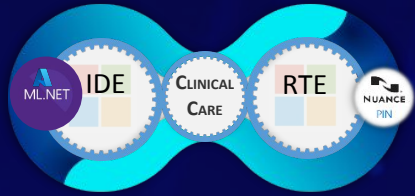


Precision Imaging Network

“An image is worth a thousand words...”

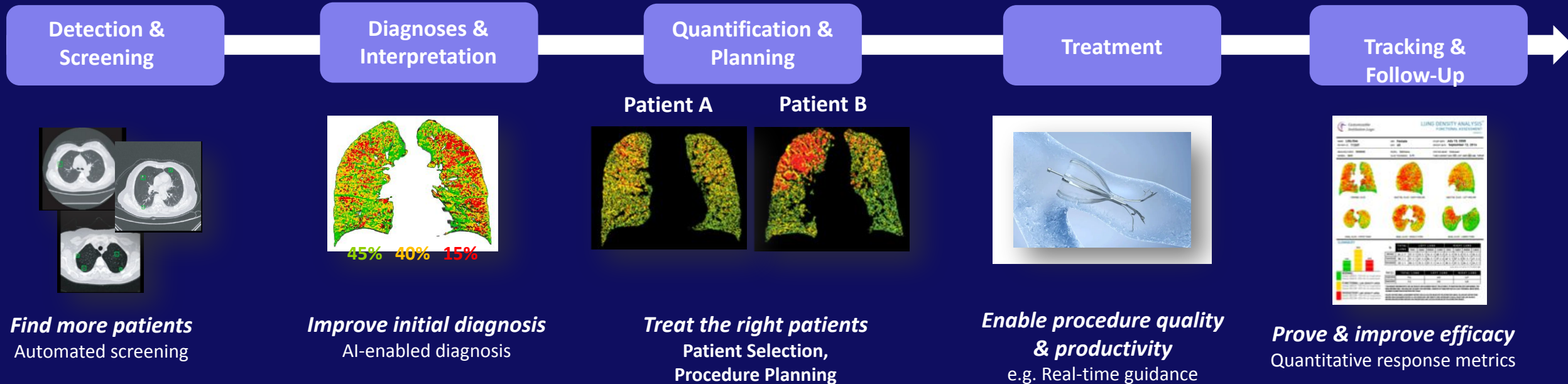
Or in this case, a thousand clinical data points *seen and unseen*.

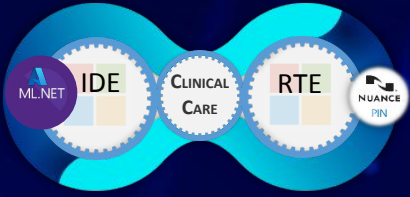




Precision Imaging Network

Delivering imaging AI across the patient journey





Precision Imaging Network leverages three cloud-based technology pillars

Diagnostic Image sharing

PowerShare: The largest and fastest growing image sharing platform in the U.S.

11,500+
connected
healthcare
facilities

Diagnostic Image reporting

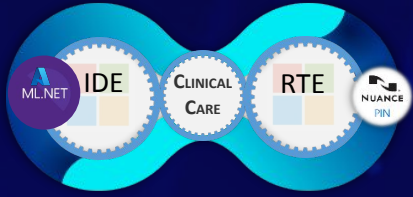
PowerScribe: The most widely used radiology workflow and reporting platform in the world

80%
of all reports
annually

Integrated imaging AI

Established platform that seamlessly integrates imaging AI into care delivery

Growing
collection of
proven AI
services



Precision Imaging Network

1 Diagnostic Image Sharing



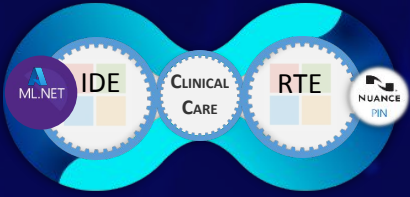
11,500+ providers
Including largest
pediatric network

Integrated into > 65
different PACS with
intelligent edge
device for DICOM and
HL7 data exchange

350 new providers
added each quarter

Connected PACS





Precision Imaging Network

2 Diagnostic Image Reporting

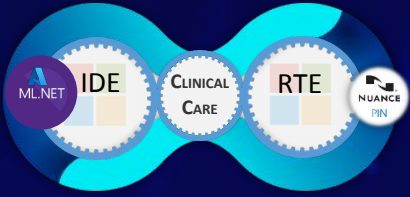


80% of all
(or +/- 340M) diagnostic
imaging radiology
reports in the US

Critical pillar to help
drive workflow efficiency

Trusted interface to drive
workflow efficiency

Requested by all
customers & partners
bring AI content into the
report



Precision Imaging Network

2 Diagnostic Image Reporting



Unlock AI's full potential



Point-of-read

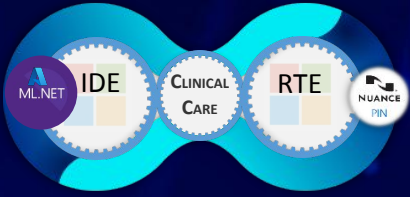


Point-of-care

During routine day to day radiologist reporting

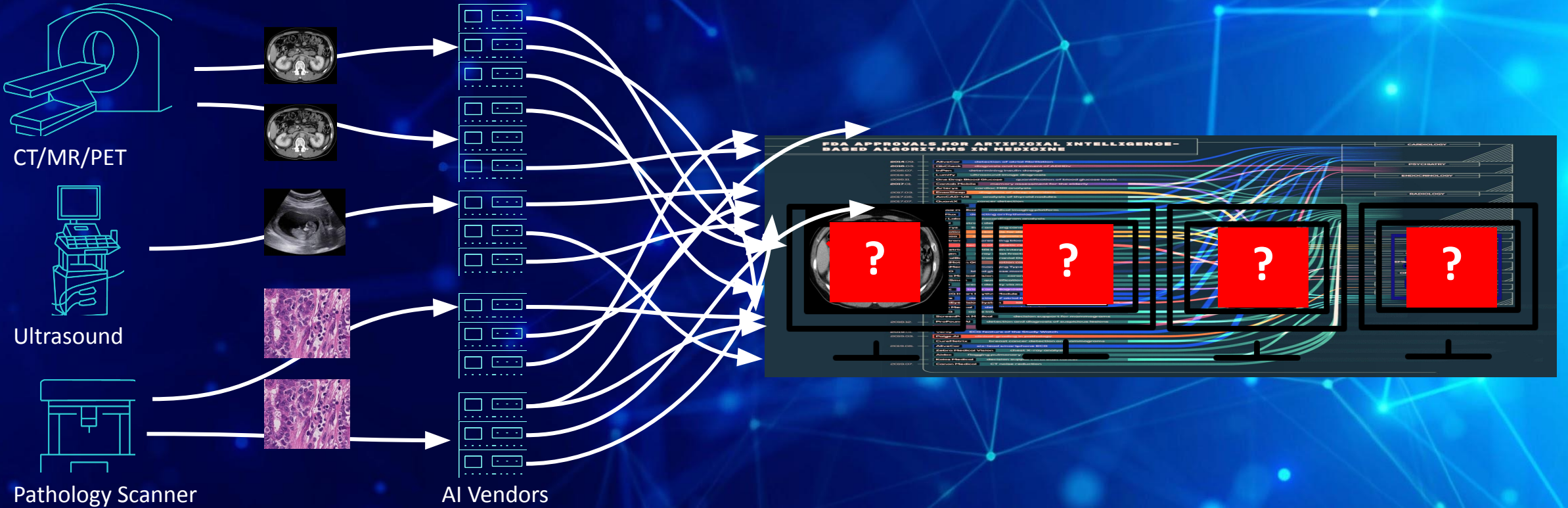
Share AI model content to downstream clinicians

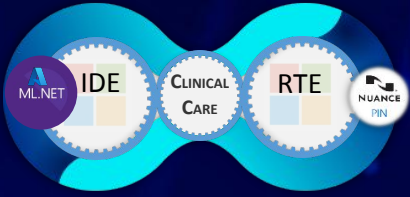
Make more informed treatment decisions



Precision Imaging Network

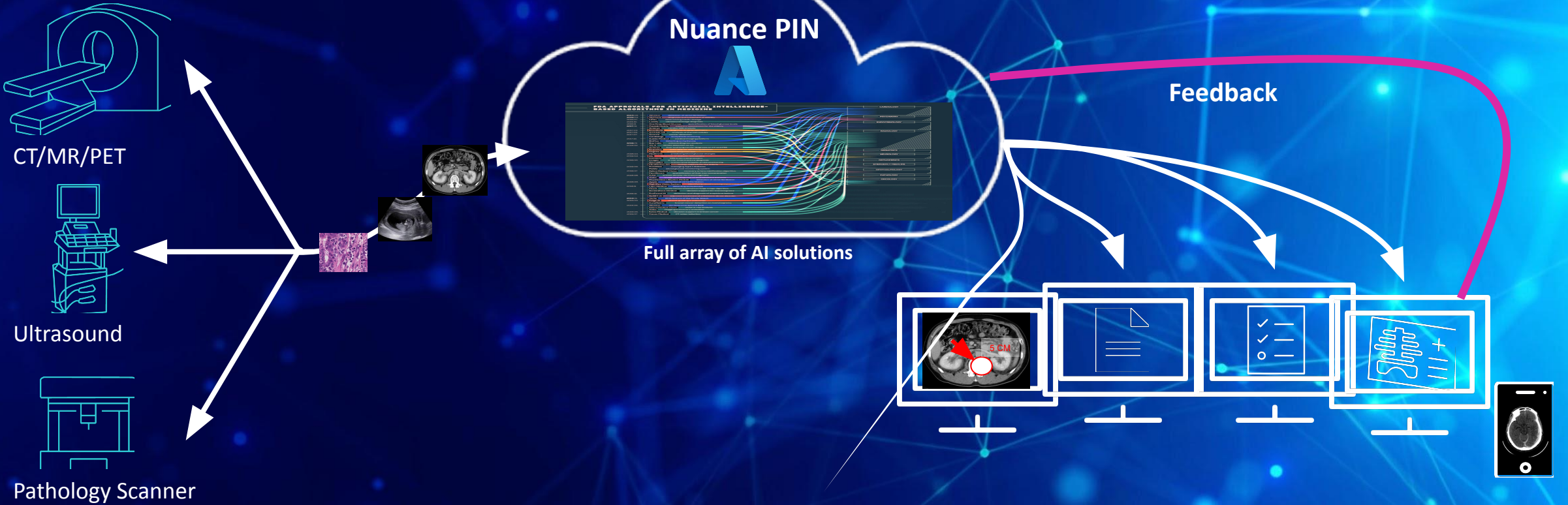
3 Workflow integrated imaging AI

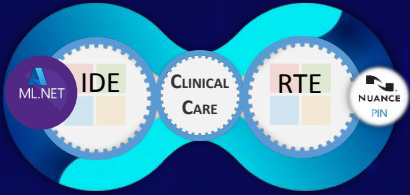




Precision Imaging Network

3 Workflow integrated imaging AI





Precision Imaging Network - RTE

Incentivize quality, reduce cost, improve care coordination

Using imaging biomarkers

- Qualify patients for life-enhancing drugs
- Identify patients for clinical trials

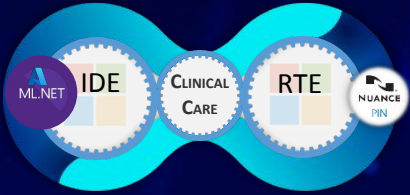
Supports earlier diagnosis, informs treatment and planning, and augments decision-making

Qualifies patients sooner and more accurately for life-enhancing medical devices

Boosts efficiency through workflow prioritization, proactive notifications, and AI-based findings

Accelerates development, deployment, and adoption of AI

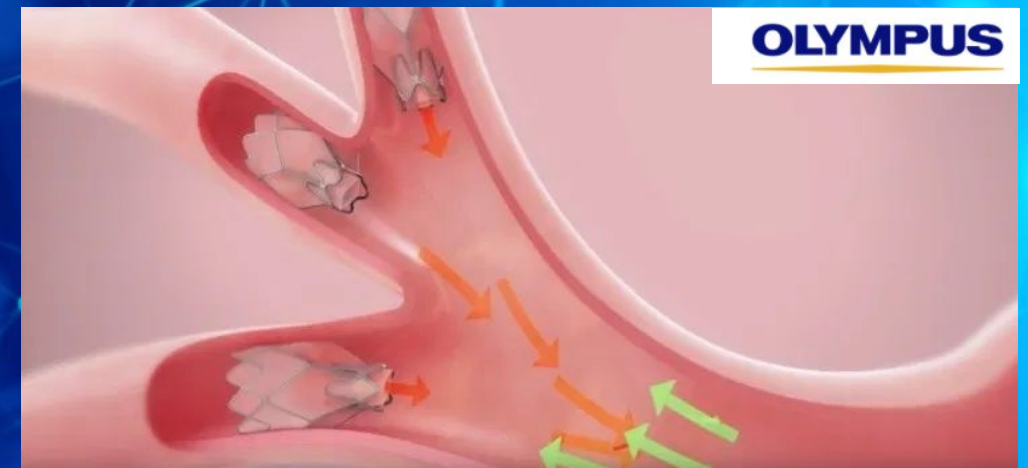


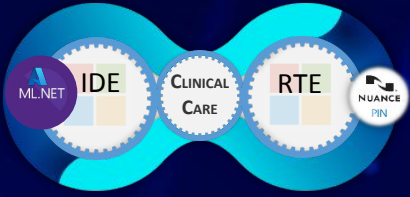


Precision Imaging Network - RTE

Acute Emphysema: a severe form of Chronic Obstructive Pulmonary Disease(COPD)

- +/- 500k patients living with acute emphysema could benefit from the EBV device
- Cannot qualify patients
- 90-day period / 27 candidates / 4 patients scheduled



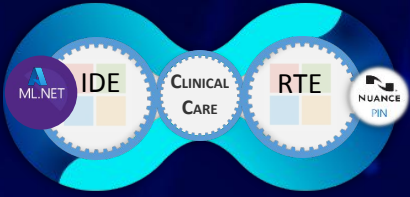


Precision Imaging Network - RTE

Idiopathic pulmonary fibrosis (IPF)

- 40%-60% go undiagnosed
- Hard to diagnose patients during routine lung cancer screening
- 1.5% diagnosed with ILD of which 50% IPF

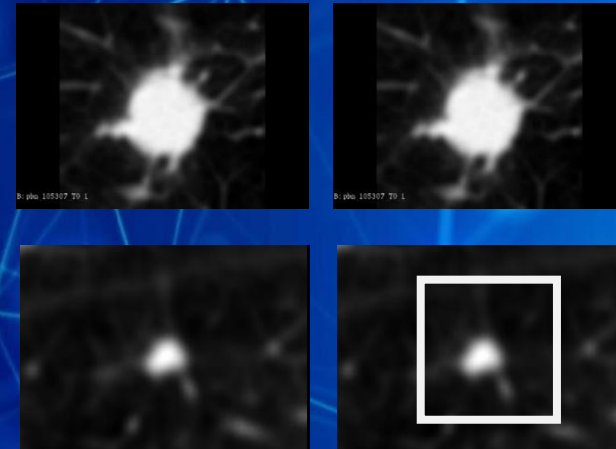




Precision Imaging Network - RTE

Lung cancer detection

- Radiomics techniques
- Biomarkers able to detect, segment & characterize lung lesions
- Ability to diagnose early stage cancers
- Developed using imaging and pathology data





Remove
Data Silos

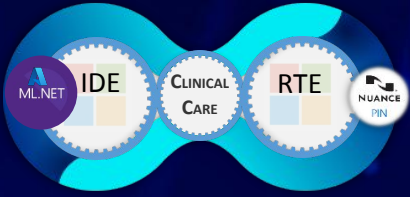


Intelligent Tools
to Accelerate AI



Last Mile
Delivery

Thank you.



Precision Imaging Network - RTE

Chronic thromboembolic pulmonary hypertension (CTEPH)

- Approx ~ 11,000 likely CTEPH patients
- 40%-60% go undiagnosed
- Working with partners to diagnose all patients

