InnoMatch

powered by

EIC INNOVATION PROCUREMENT PROGRAMME

StrokeViewer

case study

NICOLAB

with the support of

Regione Lombardia

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PILOT: Nico-lab B.V. & Regione Lombardia

StrokeViewer | Healthcare and Digital Emergency Medicine

10 MINS	82%	569 CASES	>99.5%
TIME SAVED PER CONSULT	**MOBILE APP ADOPTION**	**EMERGENCY PATIENTS TRIAGED**	**SYSTEM AVAILABILITY UPTIME**
Reduces clinical decision delays between regional hospitals during acute stroke cases	41 active hospital clinicians reviewing brain scans directly on mobile devices	Acute stroke cases processed through the platform across 3 participating hospitals	High operational reliability during live 24/7 hospital emergency operations

PILOT PROFILE

EIC Awardee: Nico-lab B.V.

Solution: StrokeViewer

Partner: Regione Lombardia

Testing Ground: Hub and Spoke Regional Stroke Network (1 Central Specialist Hub Hospital at Papa Giovanni XXIII and 2 Regional Spoke Hospitals at Bergamo Est and Crema)

Sector & Challenge Focus: Healthcare / Digital Health & AI Medical Imaging

The Challenge

When a patient suffers an acute stroke (a sudden blockage in a brain blood vessel), millions of brain cells die every minute. In the Lombardy region of Italy (home to 10.4 million people), acute stroke care operates across a network of central specialist hospitals (Hubs) and smaller local community hospitals (Spokes). Previously, when a patient arrived at a local hospital, doctors had to manually export brain scan images, establish secure computer connections, or make multiple phone calls to consult with off-site specialists. These technical hurdles caused crucial delays in deciding whether to give clot-busting medication or perform emergency clot-removal procedures.

The Solution

StrokeViewer is a cloud-based Artificial Intelligence software platform. When a patient receives an emergency Computed Tomography (3D brain X-ray scan) at any participating hospital, StrokeViewer automatically analyses the images in minutes to detect signs of stroke. It alerts specialists immediately via a secure smartphone mobile application and web browser, allowing doctors from different hospitals to view high-resolution brain scans simultaneously, collaborate in real time, and agree on life-saving treatment decisions without delay.

Objectives

The main goal of the trial was to prove that artificial intelligence image sharing can operate reliably across different hospital computer networks during emergency stroke care. By testing the technology in live hospital

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conditions, Regione Lombardia aimed to evaluate whether the system improves clinical efficiency and reduce technical risk before committing public funds to a region-wide public procurement tender.

Constrains

Setting up the trial required connecting StrokeViewer into complex hospital networks, including Picture Archiving and Communication Systems (the central databases hospitals use to store medical images) and Radiology Information Systems. The team had to navigate strict European data privacy rules, establish secure connections between independent hospitals, and train busy emergency doctors to adopt a new mobile workflow during high-stress emergency shifts.

Performance

During the trial across three hospital centres, 41 active medical professionals processed 569 emergency stroke cases (averaging 45 cases per week). Clinicians reviewed brain scans on the mobile application in 82% of all cases, reaching 100% mobile usage at the Seriate local hospital. The artificial intelligence system delivered brain scan analyses in 4 to 6 minutes, helping clinicians save an estimated 10 minutes per patient consultation. Across the network, this freed up between 95 and 339 total hours of clinical time while maintaining over 99.5% system availability.

Partner Operational Improvements

10-minute reduction in clinical consultation delay per stroke case, improved cross-hospital teamwork, and reduced emergency phone call friction.

> *"Important cooperation. We conduct market consultations more frequently."*
>
> **— Regione Lombardia**

SUCCESSFUL PILOT VALIDATION

The InnoMatch pilot successfully demonstrated the operational feasibility of StrokeViewer across three hospitals within Lombardy's stroke care network. The results highlighted the potential of AI-supported image sharing and mobile collaboration to improve the efficiency of time-critical clinical workflows.

For Regione Lombardia, the pilot provided valuable technical and operational evidence to assess the potential for wider deployment across its regional healthcare system. Regione Lombardia has already launched an Open Market Consultation to engage potential suppliers, explore available solutions and inform the preparation of a future public procurement procedure. Future adoption will depend on the definition of technical requirements, institutional decisions and applicable public procurement procedures.

The pilot therefore represents an important step towards potential regional adoption, while demonstrating how real-world testing can help public healthcare buyers reduce uncertainty and prepare for future innovation procurement.

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