Integrating an End-to-End AI Solution into Clinical Workflow

From Clinical Research to Clinical Routine
AI End to End Solution
From Clinical Research to Clinical Routine

Research Apps

Marketplace
Clinical Apps to be validated

Validated Clinical Apps

Research
Translation
Clinical Routine
AI End to End Solution
From Clinical Research to Clinical Routine
From Data Integration towards Deployment
AI End to End Solution
From Clinical Research to Clinical Routine
IntelliSpace Discovery AI
Open Innovation Platform enabling AI Research

IntelliSpace Discovery is not for clinical use. It cannot be used for patient diagnosis, treatment selection, and planning.
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Zero-footprint
- Access everywhere via Browser

Core package with
- Workflow and study management
- Auto- and Batch processing

Clinical Application suites
- Efficient analysis of clinical research data

Advanced annotation tools
- Efficient ground truth generation

Plugin infrastructure
- Access to latest processing and analytics functionality
- Open platform

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AI End to End Solution
From Clinical Research to Clinical Routine

Research Apps → Marketplace → Clinical Apps to be validated → Validated Clinical Apps

Research → Translation → Clinical Routine
Challenges in the Clinical Workflow
Addressed by Clinical Validated AI Applications
Integrated in the AI driven Workflow

- **Patient scheduling:**
  40% of suggested follow up examinations do not happen
  Reduction of no-show appointments
  ...

- **Patient data acquisition:**
  High inconsistence between follow up scans and the baseline (69%)
  5% all MRI exams have motion artefacts
  ...

- **Patient data reading:**
  Access to relevant clinical data (Therapy, blood markers, prior images...)
  Reading time and Expertise: Quantitative results and reading support
  ...

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AI in the Clinical Workflow Overview:
Seamless Integration of AI Applications in the Workflow. Key for Success.
Building Blocks of a Configurable Solution

AI Infrastructure - Seemless Integration.
Marketplace - Enables AI Ecosystem.
Clinical Service - Customer Centric Solutions
Marketplace
Enabling an AI Ecosystem

Philips businesses and applications
Application specific marketplaces
Single marketplace infrastructure
Validated submissions
Ecosystem of partners

IntelliSpace Portal
Illumeo
Tasy
IntelliSpace Genomics
Digital Pathology
Philips Neuro
Cardiology Informatics
...

Marketplace

Philips catalog items
3rd party submitted items
Michael Perkuhn
Philips Healthcare Informatics / ICAP