aidoc

EMPOWERING RADIOLOGISTS WITH PROVEN AI

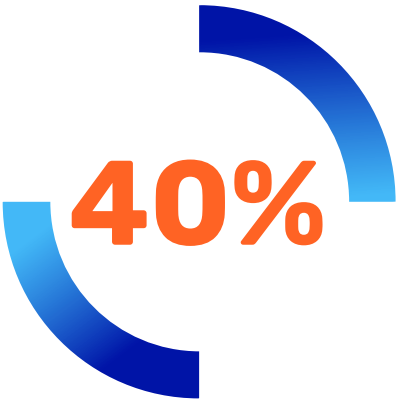
Streamline Radiology Workflows And Improve Care Coordination

Core Challenges to Today's Radiology Departments

Multiple factors are contributing to the clinical, operational and financial challenges for radiology departments today.

Miss Rate Of Key Diagnoses[1]

795,000 annual deaths due to misdiagnosis[2]



Don't receive adequate follow up[3]

Leads to poor clinical outcomes and lost revenue

Radiologists feel symptoms of burnout[4,5]

Radiologists are turning to AI algorithms to combat these challenges, but using single point algorithms for specific radiology applications can create complications.

The Challenge of Deploying Single Imaging Algorithms

AI solutions deployed in singular use cases have demonstrated the capacity to enhance radiology efficiency, but they can create problems that create a negative user experience, such as dealing with multiple interfaces. The key is to deploy holistically.

> **With a holistic approach to implementing AI, organisations comprehensively reconsider, restructure and realign technology, workflows, people and organisational structures to create and sustain value with AI. In doing so, they go beyond the possibilities offered by the status quo, as opposed to simply inserting an AI application to legacy systems that may only temporarily improve the status quo without creating lasting value.[6]**

Kim, B. et al.
"A holistic approach to implementing artificial intelligence in radiology"

Empower Radiology To Do More...

Aidoc's advanced AI platform revolutionizes healthcare by boosting efficiency, streamlining workflows and improving patient outcomes. It empowers radiologists to play a central role, fostering deeper connections throughout the patient journey and enabling more impactful care.

Radiology Connected to Care Teams

Aidoc's Impact for Radiology

Enhance Efficiency:

Triage algorithms alert on suspected and unsuspected acute findings. Measurement algorithms automate repetitive tasks.

Streamline Workflows:

Provides bi-directional care team communication through a mobile application.

Improve Patient Outcomes:

Detection algorithms increase disease awareness. Incidental and actionable follow-ups are effectively managed.

Leverage Deep Integrations:

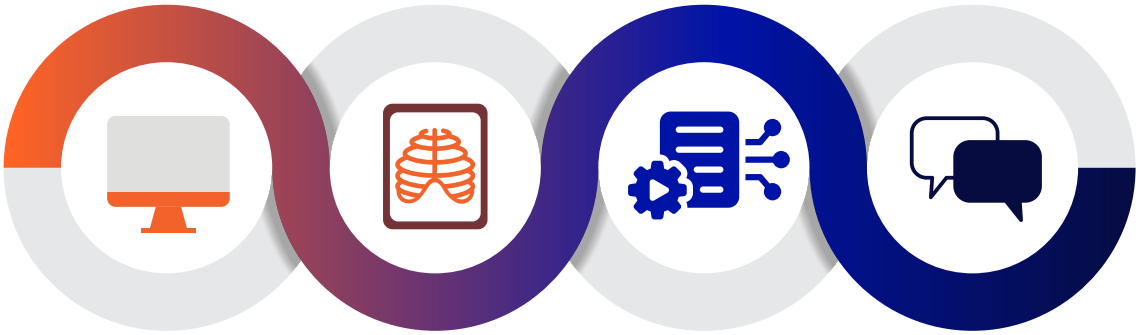
Aidoc enhances radiologist workflows by integrating deeply with your:

- EHR (i.e., Epic, Cerner)
- PACS (i.e., Optum - Change Healthcare, Merative)
- Scheduling (i.e., Qgenda, Amion)
- Reporting systems (i.e., Nuance, 3M™ M*Modal)

The Aidoc Widget - A Single Interface to Drive AI Workflows

Radiologists prefer a unified interface over juggling multiple systems to review algorithm results. Aidoc's Widget offers a single interface displaying AI results from all performed algorithms, including those from Aidoc's strategic partners.

One Interface - One User Experience



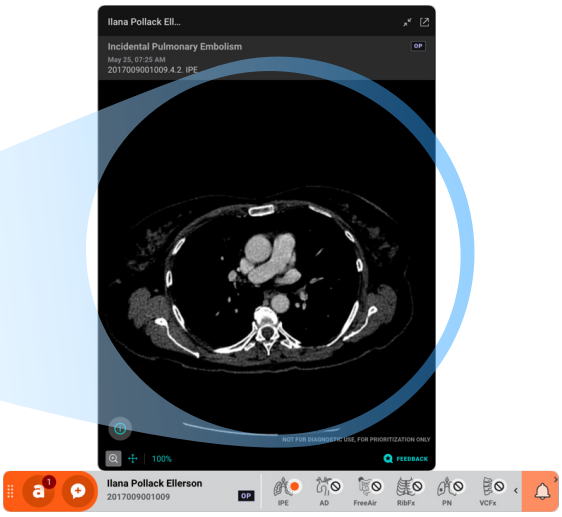
Runs on any workstation

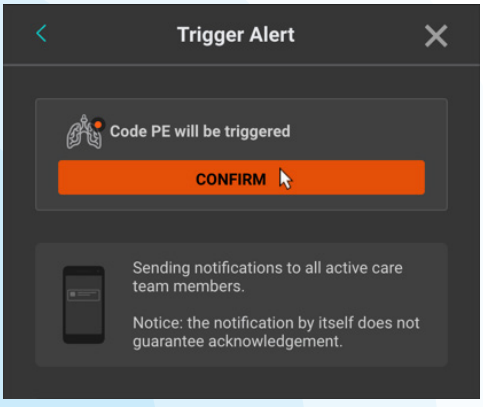
Provides key images and summary of AI results

Tightly integrated with PACS, including AI triage results marked directly in worklist

Facilitates chat with downstream care team members' mobile devices

View results of every algorithm run, both with and without AI findings





Radiologists receive alerts for suspected acute findings, allowing them to quickly prioritize critical cases and activate care teams via mobile notifications, such as this Code PE example.

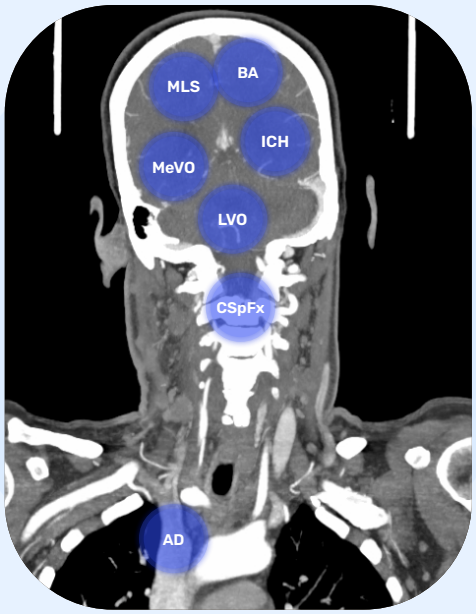
Always On Imaging

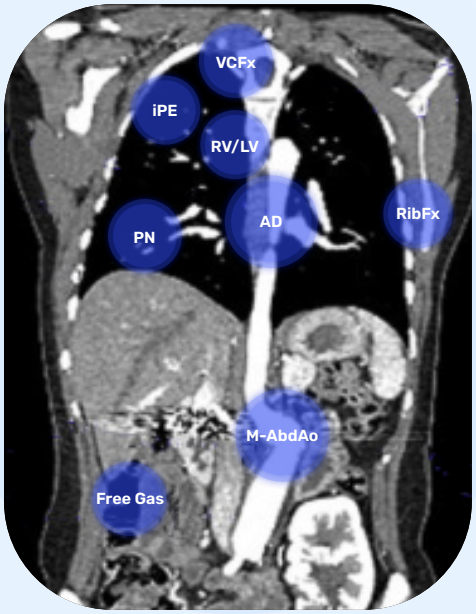
Aidoc's solution goes beyond merely using exam protocols to determine which algorithms to apply. It uses AI intelligence to activate every relevant AI algorithm it can, helping to identify both the expected and unexpected findings, as well as enhancing disease awareness and comprehensiveness.

Stroke Protocol Example:

A Stroke protocol consists of a NCCT and CTA of the head and neck. Aidoc will run these algorithms including those with just a partial field of view of the chest:

- Aortic Dissection (AD)
- Brain Aneurysm (BA)
- C-Spine Fracture (CSpFx)
- Intracranial Hemorrhage (ICH)
- Midline Shift (MLS)
- Vessel Occlusion (MeVO and LVO)





Trauma Example:

A trauma patient presented to the Emergency Department due to a car accident and a contrast enhanced CT of the chest and abdomen was ordered. Aidoc ran 8 algorithms in parallel to ensure no delay in getting the results back to the radiologist.

- Abdominal Aortic Measurements (M-AbdAo)
- Aortic Dissection (AD)
- Incidental Pulmonary Embolism (iPE)
- Intra-abdominal Free Gas
- Pulmonary Nodule (PN)
- Rib Fracture (RibFx)
- RV/LV Ratio
- Vertebral Compression Fracture (VCFx)

Imaging AI for a Broad Range of Pathologies

Aidoc offers a range of FDA-cleared algorithms that enhance diagnostic awareness, streamline workflows, and improve patient outcomes. Integrated into existing systems, they provide a unified interface for AI results, seamless PACS integration, easy activation, care team communication, and tracking of follow-up recommendations.

 Neuroscience	• Brain Aneurysm • CT Perfusion (Icometrix Icobrain CVA) • Fractures - C-Spine • Fractures - Vertebral Compression • Intracranial Hemorrhage • Midline Shift • Vessel Occlusions (LVO, MeVO)
 Aortic	• Abdominal Aortic Measurement • Aortic Dissection
 Cardiology	• Cardiac Ultrasound (Us2.ai) • Coronary Artery Calcification
 Venous Thromboembolism	• Incidental Pulmonary Embolism • Pulmonary Embolism • RV/LV Ratio (Imbio)
 Chest, Abdomen, Breast and Bone	• Breast Lesions (ScreenPoint Transpara) • ETT Malposition • Fractures - Extremity (Gleamer BoneView) • Fractures - Rib • Intra-abdominal Free Gas • Pneumothorax • Pulmonary Nodules (Riverain ClearRead CT)

Our AI Application Partners

Aidoc continues to add strategic partnerships with other leading AI vendors, all seamlessly deployed from Aidoc's aiOS™.

Gleamer

Riverain TECHNOLOGIES

icometrix MEASURABLY BETTER

SCREENPOINT Medical

imbio

US2.AI EVERYONE CAN ULTRASOUND

One Platform, Comprehensive Care: Transforming Healthcare with AI

Clinical AI Integration Isn't Simply One-Size-Fits-All. These Approaches Exist Today:

Point Solution vendors
Offer rapid deployment and focus on AI algorithms for specific pathologies, but can create data silos and limit scalability.

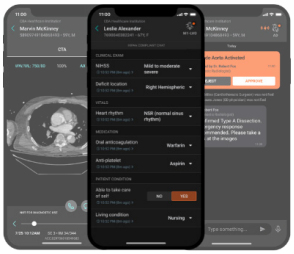
Marketplace vendors
Offer a way to choose from different AI point solutions, but creates different workflows and user experiences for each solution installed.

Platform vendors
Offer a centralized infrastructure for implementation. The key difference between point solutions, marketplaces, and platforms lies in how they mitigate risks associated with large-scale technology shifts.

Not All Platforms Are Created Equal - Meet Aidoc's aiOS™

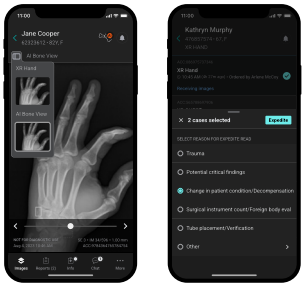
The unified framework provided by the aiOS™ brings together disparate systems to seamlessly connect algorithms and care coordination solutions on a single interface. Delivering comprehensive care with unmatched operational efficiency and clinical excellence.

Diagnostic Imaging AI Algorithms

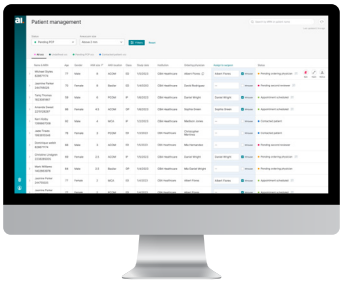


Acute Interventional Care Team Coordination

aidoc aiOS™



ED Communication and Coordination



Ambulatory Follow-up Management for PCPs and Clinics

"When it comes to integration, resource-intense is the word. If it's easy to integrate, that makes life a lot easier for us as an organization. One of the things we look for in a partner is someone who has built a solution that is fairly seamless, and one that we can pick up and run with. And that was the experience with Aidoc."

ONYEKA NCHEGE,
Chief Information Officer, Novant Health

Future-Proofing Your AI Investment

Aidoc's aiOS™ is the platform that enables you to achieve an effective, scalable, reliable and secure AI strategy. These processes are all automatic and included with any Aidoc AI solution, delivered on a single platform that is HIPAA-compliant with de-identification methodology so no PHI ever leaves your premises.

True Enterprise Orchestration

Automated, low-latency management of all AI solutions from a single platform allows for any multi-use, scalable AI strategy

- Aidoc Algorithms
- Aidoc AI Application Partners
- Add Your AI*

Seamless Native Integrations

Out-of-the-box integrations into your systems of record creates back-end efficiency and limits the number of outside connections

- EHR
- PACS
- VNA
- Scheduling

Best-In-Class Security Standards

Built-in compliance with the strictest global security and privacy regulations, means all AI solutions integrated with the platform adhere to the same standards

- HIPAA
- GDPR
- SOC 2 Type 2

aidoc aiOS™

Built-In AI Governance

Hyper-accurate monitoring that can identify data drift even in the presence of imperfect natural language processing (NLP)

- Monitoring
- Reporting Performance Dashboards

Highly Configurable Workflows

Flexible platform drives consistent presentation of findings in customizable workflows aligned to protocols

- Radiologist Workstation
- Patient Management
- Care Coordination

*These algorithms are for the use of the institution only.

Demonstrated Impact on Outcomes

YaleNewHavenHealth

Irena Tocino, M.D

Vice Chair of Imaging Informatics

"It was important to see that we were aligning our expectations and vision with a partner that shares our ethos. And we saw a very humanistic approach in Aidoc."

- Up to 13% reduction in length of stay [7]
- Up to 13% decrease in turn-around time[8]

Mount Sinai

Robert Lookstein, M.D.

Interventional Radiologist
Executive Vice Chairman Dept. of Diagnostic, Molecular, and Interventional Radiology

"With Aidoc we're fully integrated with the EMR... vital signs are updated constantly and you could see trends on your phone. And this happens instantly."

- Minimized notification fatigue by PERT activation only when necessary[9]
  - 2,262 total PEs were identified
  - 364 PERT activations
  - 96% alert accuracy
    (Numbers over 18 month period)
- 40% reduction in time to treatment decision[9]

UW Medicine

Dushyant Sahani, M.D.

Chair of Radiology

"This is a collaboration between radiology, emergency medicine, cardiothoracic and vascular surgery, and interventional radiology I am confident any type of strategy that improves communication, better access, and timely treatment, more than likely will have a better outcomes."

- 31% faster time to notification[10]
- 99-minute decrease in time to treatment[10]
- Improved awareness of incidental findings

The Aidoc Difference: Always On for Patient Outcomes

Aidoc empowers care teams to streamline workflows to support accelerated, collaborative and accurate decision-making. Our AI-powered and AI-enabled solutions help breakdown silos that are barriers to improved patient outcomes, clinical efficiency and economic value for healthcare systems. A pioneering force in clinical AI since 2016, Aidoc has one of the largest install bases in the industry and is regularly recognized for groundbreaking innovations, including the enterprise aiOS™ platform.

Used in more than **1000+** medical centers

CLEARED FDA CLEARED

Market leader in FDA clearances **(17)**

130+ clinical studies illustrating value

3 million patients analyzed in clinical settings each month

$10.8 million annual net contribution potential from enterprise solution*

~60% of employees in AI research and development

This is an example calculation assuming a 1k bed health system with 25% net contribution margin. Payor mix of private/self pay/other 67%; Medicare/Medicaid 28%; and no pay 5%. To understand the potential ROI for your facility, please reach out to Aidoc to understand how we can provide a customized calculation for you.

"AI is different than other transformative technologies in that we're finally again at that inflection point of actually using data for the benefit of our patients, not just collecting data"

Jeff Sturman
SVP & CDO
Memorial HealthcareSystem

Aidoc is a pioneering force in clinical AI.

We focus on aiding and empowering healthcare teams to optimize patient treatment, which results in improved economic value and clinical outcomes.

Since 2016, Aidoc's clinically proven AI solutions have eliminated silos, increased efficiencies and improved outcomes by delivering critical information when and where care teams need it – leading to immediate collective action.

Powered by Aidoc's exclusive aiOS™, we analyze and aggregate medical data to enable care teams to operationalize the unexpected and work seamlessly with a continued focus on the patient.

Aidoc AI is always on, running in the background to change the foreground.

Citations:
1. Aidoc internal data on file. 2. Newman-Toker, D. E., Nassery, N., Schaffer, A. C., Yu-Moe, C. W., Clemens, G. D., Wang, Z., Zhu, Y., Tehrani, A. S. S., Fanai, M., Hassoon, A., & Siegal, D. (2023). Burden of serious harms from diagnostic error in the USA. BMJ Quality & Safety, 33(2), 109–120. https://doi.org/10.1136/bmjqs-2021-014130 3. Aidoc internal data on file. 4. Baggett SM, Martin KL. February 2022. Medscape radiologist lifestyle, happiness & burnout report 2022. Medscape. 5. Hall, J. (2022, August 9). Has burnout become an epidemic in radiology? Diagnostic Imaging. https://www.diagnosticimaging.com/view/has-burnout-become-an-epidemic-in-radiology- 6. Kim, B., Romeijn, S., Van Buchem, M., Mehrizi, M. H. R., & Grootjans, W. (2024). A holistic approach to implementing artificial intelligence in radiology. Insights Into Imaging, 15(1). https://doi.org/10.1186/s13244-023-01586-4 7. Davis, M., Rao, B., Cedeño, P. A., Saha, A., & Zohrabian, V. M. (2022). Machine learning and improved quality metrics in acute intracranial hemorrhage by noncontrast computed tomography. Current Problems in Diagnostic Radiology, 51(4), 556–561. https://doi.org/10.1067/j.cpradiol.2020.10.007 8. Utilizing Machine Learning to Improve ED and In-Patient Throughput in Cases of Acute Intracranial Hemorrhage by Non-Contrast Head CT, Davis et. al., RSNA 2019 https://aidoc-team.monday.com/boards/734114473/pulses/734718110 9. Lookstein R. Presentation: Artificial Intelligence and Acute Pulmonary Embolism, Icahn School of Medicine at Mount Sinai, ISET Jan 2024 https://vimeo.com/user117599639/review/920532600/4eeb761741 10. Aidoc Webinar: Operationalizing an AI Strategy with Aidoc's Clinical AI Platform https://www.aidoc.com/learn/webinars/operationalizing-an-ai-strategy-with-aidocs-enterprise-clinical-ai-platform/