HOPPR® AI FOUNDRY

Accelerating AI Development in Medical Imaging

SOC 2 TYPE II ATTESTED

HITRUST CERTIFIED

HIPAA-COMPLIANT

The secure developer environment for building, fine-tuning, and validating medical imaging AI

HOPPR® AI Foundry gives developers, imaging vendors, and healthcare innovators with the necessary infrastructure, trusted data, foundation models, and fine-tuning tools to build AI-powered medical imaging applications more quickly, efficiently, and with the traceability healthcare demands.

THE CHALLENGE

General-purpose AI platforms are too rigid for the real demands of regulated healthcare.

Most AI development tools lack the traceability, data, documentation, and infrastructure that medical imaging demands. Teams face fragmented tooling, uncertain data licensing, narrow training sets that fail in diverse clinical environments, and the costly burden of building compliance infrastructure. Meanwhile, the window for innovation keeps tightening.

THE SOLUTION

From proof-of-concept to real-world readiness, in one secure development platform.

Created by practicing radiologists and machine learning engineers, the Foundry reflects a deep understanding of what medical imaging AI development requires, not just in the lab, but in the real world. The result is a development environment where speed, compliance, and clinical relevance are built in from the start.

What the HOPPR® AI Foundry Provides

Proprietary, Large-Scale Foundation Models
Proprietary Chest X-ray and 2D Mammo Vision Transformer (ViT) models trained on tens of millions of labeled, annotated, de-identified images. Results are delivered in structured formats, JSON, and text for easy integration.

Curated Data with Known Provenance
Access one of the largest repositories of labeled, validated medical imaging data in private industry. You can also bring your own data into the Foundry for secure containment and full customer-controlled access.

Fine-Tuning and Inference Tooling
Fine-tune models for specific use cases via an intuitive UI or developer-friendly SDK. Run inference on fine-tuned or third-party models and integrate outputs into your applications via RESTful APIs.

Developer-Centric, API-Driven Architecture
Interact with models through robust APIs, trigger fine-tuning workflows and integrate outputs into your applications, evaluation pipelines, or downstream systems, with the flexibility to scale as needs evolve.

QMS-Aligned Infrastructure
Built under a QMS aligned with ISO 13485, IEC 62304, ISO/IEC 42001, and ISO 14971. Every model update and data interaction is versioned, tracked, and documented, providing a complete audit trail for regulatory preparation.

Secure, HIPAA-Compliant, & Scalable Environment
Purpose-built for medical imaging AI. Manages data ingestion, de-identification, fine-tuning, validation, inference, and version control in a single secure platform. No fragmented tooling, no manual workarounds.

DATA HIGHLIGHTS: AN UNMATCHED MOAT

167M	20 Years	~1,400	1000s
Training & Fine-tuning Studies	Logitudinal Data	Imaging Centers Across 8 States	Diagnostic Scenarios

FOUNDATION MODELS

Proprietary Models Built for Medical Imaging AI

Trained using self-supervised learning (SSL), these models learned robust visual representations from unlabeled data, generating pseudo-labels, uncovering hidden patterns, and generalizing across diverse datasets. Balanced to support a diverse range of patient demographics, sites, and imaging systems.

HOPPR® MC Chest Radiography ViT Foundation Model

~12.2M	~6.1M	0.91
Images	Studies	Median ROC-AUC Across Findings

Modality: Chest X-ray (frontal PA/AP views)
Anatomy: Chest - Lungs, heart, pleura, mediastinum, ribs, chest wall
Task: Classification fine-tuning + model score output. Internal validation on 24 findings, range 0.77–0.99 AUC.
Use Case: Routing, triage, and workflow prioritization via fine-tuned classifiers
Availability: Fine-tuning and inference via the HOPPR™ AI Foundry

HOPPR® EB 2D Mammography ViT Foundation Model

~24M	~4M	0.9
Images	Studies	ROC-AUC Cancer

Modality: 2D Mammography (FFDM and/or 2D synthetic | CC and MLO views)
Task: Classification (cancer, density, pacemaker) Internal validation: ROC-AUC 0.90 (cancer), 0.94 (density), 0.99 (pacemaker). Supports laterality labeling and includes 5,400 pathology-proven studies.
Use Case: Routing, triage, and workflow prioritizationn via fine-tuned classifiers.
Availability: Fine-tuning and inference via the HOPPR™ AI Foundry

HOPPR® MC Chest Radiography Narrative Foundation Model

Modality: Chest X-ray (frontal and lateral views)
Anatomy: Chest - Lungs, heart, pleura, mediastinum, ribs, chest wall, and devices (pacemaker, tubes)
Task: Generates descriptive structured textual language outputs derived from chest radiography representations for research, development, and evaluation workflows.
Availability: Access this model through the Foundry (API) to run inference and test outputs against your data. Work with FDS to make targeted modifications scoped to your use cases and requirements.

HOPPR® EB 2D Mammography Narrative Foundation Model

Modality: 2D digital mammography (FFDM and synthetic 2D from DBT)
Anatomy: Breast (bilateral; left and right laterality)
Task: Generates structured textual language outputs derived from 2D Mammography and synthetic representations for research, development, and evaluation workflows.
Availability: Access this model through the Foundry (API) to run inference and test outputs against your data. Work with FDS to make targeted modifications scoped to your use cases and requirements.

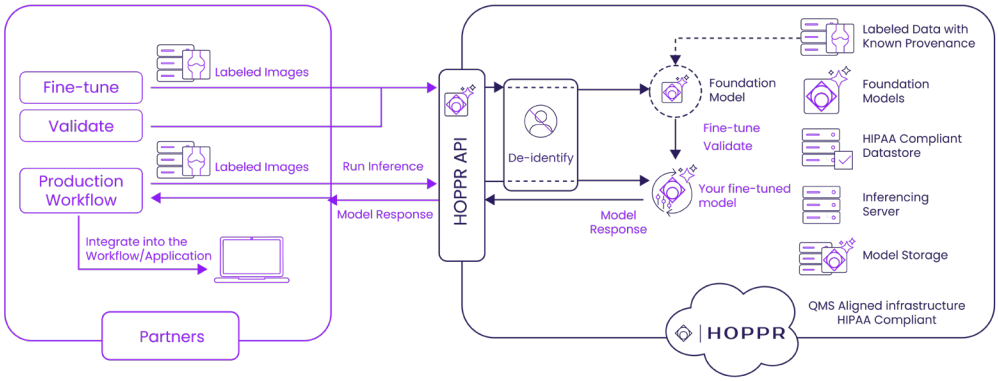
HOPPR® AI Foundry Deep Dive

3rd-Party Models Available for Inference Upon Request via The Foundry:

CheXagent-2-3b srrg impression (Stanford) Multimodal VLM | Chest X-ray (frontal AP/PA Lateral Optional)
MedGemma 4B (Google) VLM | Chest X-ray, CT, MRI, histopahology, fundus, dermatology
MedImageInsights (Microsoft) Vision-language embedding model | X-ray, CT, MRI, Mammography, ultrasound, OCT, fundus, dermatology, histopathology
NVIDIA NV-Reason CXR 3B Parameter VLM | Chest X-ray
NVIDIA NV-Generate CT 3D latent diffusion model CT: full body up to 127 anatomical classes
NVIDIA NV-Generate MR 3D latent diffusion model | MRI T1, T2, FLAIR, SWI
RadFM (SJTU) Multimodal VLM | 2D and 3D radiology X-ray, CT, MRI, and others

*Documentation on third-party models is available on their respective sites

HOPPR® AI Foundry Diagram



FLEXIBLE DATA OPTIONS

Bring your own imaging data or use HOPPR's curated, labeled, and validated datasets to fine-tune foundation models for specific use cases.

- ☑ Mammography: 5,400 pathology-proven studies with laterality labeling
- ☑ Chest Radiography: 25 datasets, 200,500+ unique PA/AP studies
- ☑ Verified provenance, sourced through structured site agreements
- ☑ Customer-controlled access with strict data containment
- ☑ Reproducible baselines for consistent model benchmarking

MODEL INTEGRATION & DEPLOYMENT

Deploy fine-tuned or third-party models into production-ready environments with control and flexibility.

- ☑ Developer-friendly RESTful APIs for downstream integration
- ☑ Structured JSON outputs for easy application embedding
- ☑ Model versioning and full change history across the lifecycle
- ☑ Scalable from early experimentation to large-scale, multi-model development
- ☑ Usage-based billing, no custom compute environment required

Disclaimer: You are responsible for making any necessary modifications, validating model performance in the final product, and obtaining any applicable regulatory marketing authorizations before commercialization.

"For us, the HOPPR AI Foundry is transformative. We can leverage our data and clinical expertise to fine-tune models, rapidly test in production, and then scale as we see improved outcomes. Foundry is instrumental in the holy grail of adaptive learning in clinical workflow."

Sham Sokka
Chief Operating and Technology Officer at DeepHealth

HOPPR® Forward Deployed Services

Build Imaging AI that works. Together.

Don't have AI/ML or DevOps engineers in-house? Forward Deployed Services was built for exactly that.

FDS embeds HOPPR's machine learning scientists, software engineers, data scientists, and clinical experts directly within your team to accelerate development at every stage.

01	02	03	04	05	06
ALIGN	**BUILD**	**INTEGRATE**	**VALIDATE**	**DEPLOY**	**SUPPORT**
Define the challenge together	Design & construct the solution	Embed into your workflow	Confirm it works in your environment	Launch into routine use	Sustain model performance

Embedded Expertise
Direct access to HOPPR's ML scientists and clinical experts, aligned with your goals.

Accelerate Innovation
Move faster from concept to validated solution without rebuilding foundational infrastructure.

Workflow-Centric Design
Solutions grounded in real clinical and operational context, built around your unique environment.

Transparent Collaboration
A true partnership model. Shared problem-solving outcomes, and success.

Ready to accelerate your imaging AI development?

Connect with our team to explore how HOPPR® AI Foundry fits your workflows and goals.

Contact HOPPR to request API access and receive onboarding support.

learnmore@hoppr.ai

www.hoppr.ai/contact-us

HOPPR.AI

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About HOPPR

Founded in 2019, HOPPR brings together experts in clinical radiology, AI development, and healthcare commercialization to advance the development of transparent and scalable AI for medical imaging. The HOPPR™ AI Foundry is a secure development platform designed for building, fine-tuning, validating, and hosting AI models for medical imaging. The platform provides curated datasets, traceable development workflows, and secure infrastructure that support responsible AI development aligned with industry quality and regulatory standards. For more information, visit www.hoppr.ai.