Standardizing Deployment of AI Algorithms

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ACR DSI Workgroup

Disclosures

- Neil Tenenholtz is employed by Microsoft Research.

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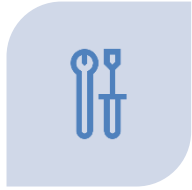AMERICAN COLLEGE OF RADIOLOGY

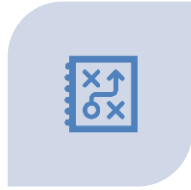# The Challenge of Deploying AI in Healthcare
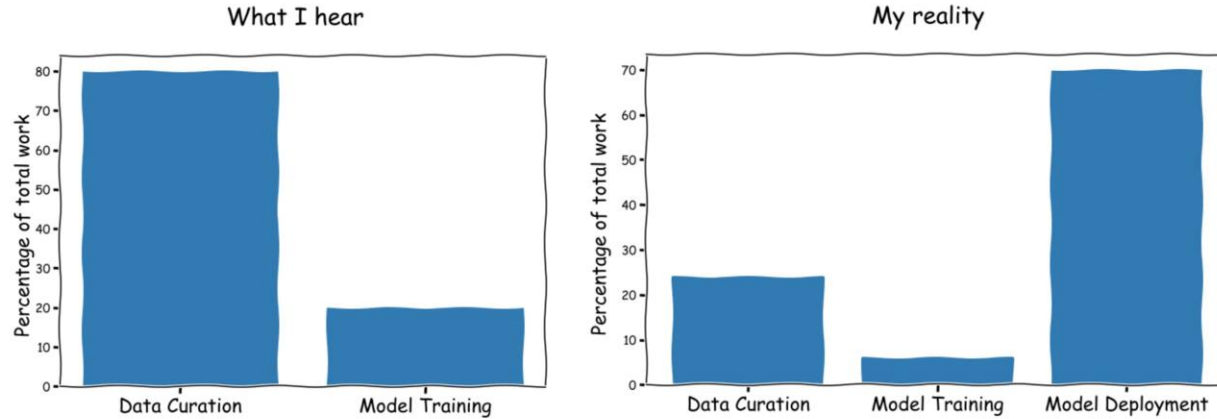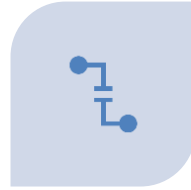

by Felipe Kitamura

No Standards for Deploying AI Models in a Clinical Setting

MODEL DEVELOPERS CREATE CUSTOM PLATFORMS

IT ADMINS MANAGE MORE COMPLEX SOFTWARE

INTEROPERABILITY IS NEAR NONEXISTENT

WORKFLOW INTEGRATION SUFFERS

COST INCREASES DRAMATICALLY

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Standardizing Model Deployment and Communication

Modularizes algorithms

Reduces number of platforms

Lowers barrier to entry

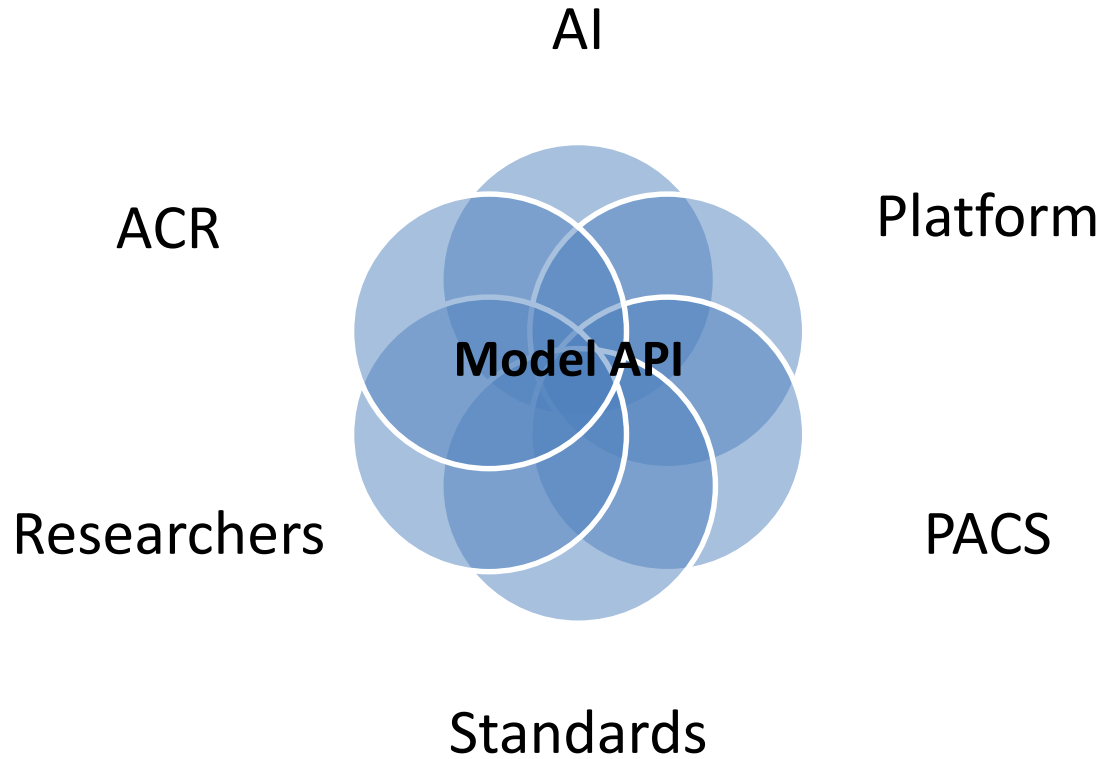Enables more diverse model ecosystem

Lowers cost

Increases adoption

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Workgroup Representation

AI

ACR

Platform

Model API

Researchers

PACS

Standards

Relevance

- IHE
  - AI Workflow for Imaging (AIW-I) profile
    - Proxy-based Inference

- DICOM
  - AI Service Discovery and Control
    - WG 23 ad hoc whitepaper
    - Work Item proposal

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More Information on Usage

ACR Website for Public Comment

DICOM WG 23 whitepaper

Local Imaging Informatics Professional

Contact API WG members

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Next Steps

Reconcile Public Comment

Mini Hackathon

Proof of Concept Implementation

DICOM Standardization

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