

AI Deployment Fundamentals for medical imaging

1. Build a team and define project scope



Assemble a diverse team to define project scope, secure funding, and plan for patient benefit.



Clearly define the problem, potential AI solutions, implementation points, user base, and impact assessment.



Document decisions and initial performance metrics for post-deployment comparison.

2. Identification of available AI tools



Explore AI solutions, assess problem alignment, ensure regulatory compliance, and consider clinical and cost-effectiveness.

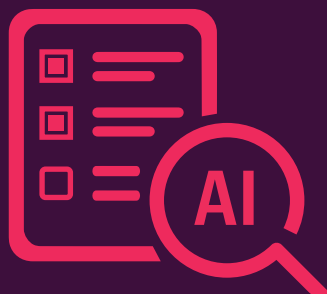


Understand evidence base, data diversity, and potential biases.

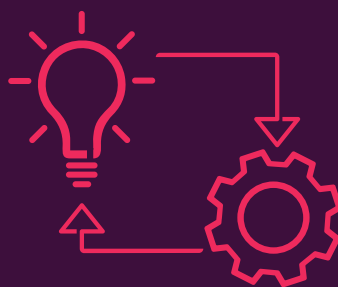


Plan for local evidence generation, performance monitoring, and safety contingencies.

3. Evidence generation and evaluation



Evaluate AI based on accuracy, clinical impact, workflow integration, and education requirements.



Use diagnostic and longitudinal studies for evaluating accuracy and real-world impact, and develop validated datasets.

4. Acquisition and deployment



Select the appropriate procurement method for the AI tool.



Define detailed requirements for the AI tool and vendor.



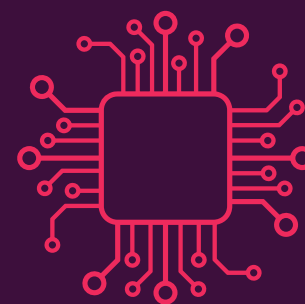
Conduct a Data Protection Impact Assessment (DPIA).



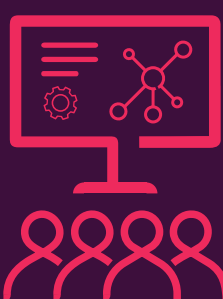
Conduct independent validation.



Identify potential hazards and mitigate risks.



Test the AI tool in a non-clinical setting (shadow mode).



Develop and deliver staff training.



Continuously monitor performance, gather user feedback, address ethical concerns, and learn from experience.

Acknowledgements

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