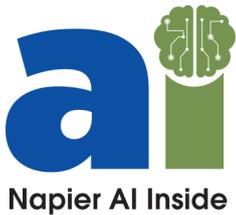


# NAPIER AI CHEST X-RAY MULTICLASSIFIER



## Are we ready for an AI-powered “Radiology Assistant?”

The X-Ray has been an important Clinical imaging tool due to its low cost and ability to assist in the detection of multiple diseases. Every year, over 5 Billion X-Rays are done, resulting in a heavy workload for Radiologists and Diagnosticians.

In the era of the pandemic, Radiology departments at Hospitals and Imaging Centres have no choice but to postpone non-urgent imaging exams, resulting in backlog issues and sometimes delayed treatment for critical cases. On top of that, dealing with subjectivity in image-based diagnosis and an unusually high volume of patients has become a harsh reality for many hospitals today.

The Napier AI Inside infuses Artificial Intelligence (AI) into technology to maximize workflow efficiencies and provide exceptional imaging performance, making the radiologist's job easier. With faster detection of health conditions and higher precision, response time to patients is lessened.

### Napier Chest X-Ray Multi-Classfier



is designed to optimize human effort, lower the cost of care, reduce screening time per case and improve diagnostic accuracy with the overall objective of enhancing clinical efficiencies, safety and increasing patient delight.



Classify into Normal and Abnormal X-rays with 92%\* accuracy

*\*Result based on Napier's classification model*



Predict % probability of occurrence for 13 conditions



Pre-prioritization for judicious time allocation based on severity

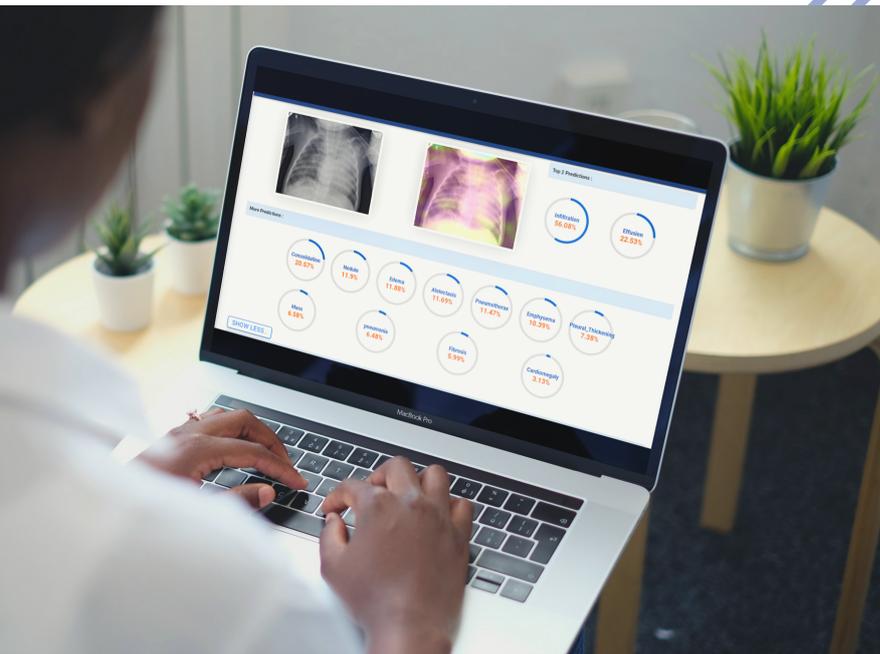


Ability to exist as a standalone solution or integrates with HIS/PACS



Algorithm trained on 100,000 data sets from global sources

# Napier AI Chest X-ray Collaborative Success



- ✓ RELIABILITY
- ✓ ACCURACY
- ✓ SAFETY
- ✓ SPEED

are most critical while performing image-based diagnosis from image capture to reporting, and eventually formulating a treatment plan. Napier AI Chest X-ray Multi-Classifer works at the intersection of Clinical and Operational outcomes, improving patient safety and enhancing Medical Staff Experience.

## CONTINUOUS IMPROVEMENT



- Detects 13 most common chest conditions and the ability to train on more abnormalities.
- Accuracy % and confidence level increases with more analysis conducted by the AI CXR.

## ROBUST TO IMAGE QUALITY



- Ability to avoid poor quality imagery due to patient positions/tissue overlays.
- Highlights focus areas of the abnormality through Heat Maps for localization.

## TECHNOLOGY AGNOSTIC



- Ability to integrate with many HIS / PACS / EMR systems.
- Can exist as a standalone platform that functions independently through image uploads.

## SUPERIOR PATIENT EXPERIENCE



- Faster turnaround time for Reporting improves patient satisfaction score.
- Increased face-time with the specialist enhances patient experience.

## PRODUCTIVITY ENHANCEMENT



- Standardization of Initial Assessment (Classify into Normal or Abnormal X-Ray).
- More time available for inter-department consulting and treatment strategy formulation.

## OPTIMIZE WORKFLOWS



- Pre-Prioritization of cases helps in judicious time allocation based on case severity.
- Reduced time per case resulting in an increased reading capacity.